Baskar
09/868987

(FILE 'CAPLUS' ENTERED AT 14:18:00 ON 15 MAY 2002)
L1 3614 S CHLAMYDIA OR CHLAMYDOPHIL? OR C PNEUMON?

FILE 'REGISTRY' ENTERED AT 14:23:44 ON 15 MAY 2002
E MYOSIN
E MYOSIN/CN
L2 523 S MYOSIN ?/CN

FILE 'CAPLUS' ENTERED AT 14:24:09 ON 15 MAY 2002
L3 11 S L1 AND (L2 OR MYOSIN)

L3 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:220928 CAPLUS
DOCUMENT NUMBER: 136:229049
TITLE: Immunological diagnostic device for systemic vasculature conditions
INVENTOR(S): Christopherson, Richard Ian; Dos Remedios, Cristobal Guillermo; Celermajer, David Stephen
PATENT ASSIGNEE(S): University of Sydney, Australia
SOURCE: PCT Int. Appl., 89 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002023191	A1	20020321	WO 2001-AU1141	20010912

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: AU 2000-56 A 20000912

AB The invention concerns a diagnostic device including a prognostic assay for parameters which are indicative of a condition or event assocd. with the systemic vasculature. More particularly, the present invention provides an assay to detect parameters assocd. with a vascular disease including cardiovascular, stroke, pulmonary, renovascular, cerebrovascular, thrombotic or generalized arterial or venous condition or event including acute coronary syndrome such as but not limited to acute myocardial infarction, heart failure, atheromoma or a thrombotic condition. The identification of these parameters or more particularly a pattern of parameters enables the diagnosis of a condition or event or the detn. of the risk of development of a condition or event assocd. to the systemic vasculature. Still more particularly, the present invention is directed to a diagnostic device comprising a set of members wherein one or more of said members has or have specific or generic binding partners in a biol. sample from an animal including human subject wherein the pattern of binding of the members to the binding

partners is indicative, predictive or otherwise assocd. with a likelihood of a condition or event within the systemic vasculature. The absence of detection of specific or generic binding partners is also of indicative or predictive value. This is particularly important in cases where patients are unable to communicate advice to a physician on their own condition, such as during surgery or for patients in a coma. It is also useful in detg. the risk of a vascular disease including cardiovascular, stroke, pulmonary, renovascular, cerebrovascular, thrombotic or generalized arterial or venous conditions or events in a healthy subject or a subject entering into an exposure to risk such as surgery or chemotherapy. The present invention is useful inter alia for the identification and/or quantitation of biochem. markers of conditions or events in the systemic vasculature such as heart disease, heart disorders, infections of the heart, stroke and thrombosis as well as the detn. of a risk of development of these conditions including the absence of disorders or absence of risk of the development of a disorder. The assessment of such conditions may be made in a clin. setting, as part of triage, as part of a routine testing protocol and/or as a lab. procedure. Diagrams describing the app. assembly and operation are given.

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:748009 CAPLUS
DOCUMENT NUMBER: 135:284102
TITLE: **Chlamydia** pneumoniae immunogenic **myosin** heavy chain homolog and its gene sequence and use for immunization against **Chlamydia** infection
INVENTOR(S): Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela
PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.
SOURCE: PCT Int. Appl., 83 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001075113	A2	20011011	WO 2001-CA461	20010404

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-194475P P 20000404
AB The present invention provides nucleic acids, proteins and vectors

for a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically **C. pneumoniae**.
The **myosin** heavy chain homolog gene is amplified from **C. pneumonia** strain CWLO29 by PCR and cloned into the pCA-Myc-His eukaryotic expression vector with transcription under control of the human cytomegalovirus promoter. The method employs a plasmid vector contg. a nucleotide sequence encoding a **myosin** heavy chain homolog of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the **myosin** heavy chain homolog gene product in the host. DNA immunization of mice with the plasmid vector achieves protection against an intranasal challenge of **C. pneumoniae**.

IT **223702-83-8**
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(amino acid sequence; **Chlamydia** pneumoniae immunogenic **myosin** heavy chain homolog and its gene sequence and use for immunization against **Chlamydia** infection)

L3 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:748007 CAPLUS
DOCUMENT NUMBER: 135:268379
TITLE: **Chlamydia** pneumoniae immunogenic **myosin** heavy chain and its gene sequence and use for immunization against **Chlamydia** infection
INVENTOR(S): Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela
PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.
SOURCE: PCT Int. Appl., 83 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001075111	A2	20011011	WO 2001-CA456	20010404
WO 2001075111	A3	20020124		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-194471P P 20000404

AB The present invention provides nucleic acids, proteins and vectors for a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically **C. pneumoniae**.

The **myosin** heavy chain gene is amplified from **C. pneumonia** strain CWLO29 by PCR and cloned into the pCA-Myc-His eukaryotic expression vector with transcription under control of the human cytomegalovirus promoter. The method employs a plasmid vector contg. a nucleotide sequence encoding a **myosin** heavy chain of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the **myosin** heavy chain gene product in the host. DNA immunization of mice with the plasmid vector achieves protection against an intranasal challenge of **C. pneumoniae**.

IT **364164-47-6**
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(amino acid sequence; **Chlamydia** pneumoniae immunogenic **myosin** heavy chain and its gene sequence and use for immunization against **Chlamydia** infection)

L3 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:756560 CAPLUS
DOCUMENT NUMBER: 133:295380
TITLE: Use of vector vaccines to induce immune tolerance to allergens and other antigens
INVENTOR(S): Johnston, Stephen Albert; Qu, Baoxi
PATENT ASSIGNEE(S): Board of Regents, the University of Texas System, USA
SOURCE: PCT Int. Appl., 58 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000062816	A2	20001026	WO 2000-US10099	20000415
WO 2000062816	A3	20010208		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-129753P P 19990415

AB The present invention provides methods for the administration of genetic vaccines to promote or induce a greater tolerance to various antigens. This will permit the treatment of patients with an allergy or autoimmunity, asthma and other immunomodulatory diseases where an undesired immune response to one or more antigens exists. In addn., methods of designing tolerizing vaccines, including methods for identifying nucleic acids that encode tolerizing antigens and cell-type specific regulatory nucleic acid sequences, are provided. Specifically, immune tolerance is induced by expression of the gene in non-antigen presenting cells that do not normally present antigens assocd. with the type II major histocompatibility complex, such as keratinocytes. Use of the

promoter of the keratin 14 gene to drive expression of a gene for .alpha.1 antitrypsin in mouse keratinocytes is demonstrated. Mice inoculated with this construct showed no response when challenged with a high-level expression cassette for the .alpha.1 antitrypsin gene. Expression constructs using the promoters of the keratin 5 or dectin 2 gene did not show tolerance.

L3 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:511103 CAPLUS
DOCUMENT NUMBER: 134:232463
TITLE: Comparison of outer membrane protein genes omp and pmp in the whole genome sequences of **Chlamydia** pneumoniae isolates from Japan and the United States
AUTHOR(S): Shirai, Mutsunori; Hirakawa, Hideki; Ouchi, Kazunobu; Tabuchi, Mitsuaki; Kishi, Fumio; Kimoto, Mitsuaki; Takeuchi, Hiroaki; Nishida, Junko; Shibata, Kaori; Fujinaga, Ryutaro; Yoneda, Hiroshi; Matsushima, Hiroshi; Tanaka, Chiho; Furukawa, Susumu; Miura, Koshiro; Nakazawa, Atsushi; Ishii, Kazuo; Shiba, Tadayoshi; Hattori, Masahira; Kuhara, Satoru; Nakazawa, Teruko
CORPORATE SOURCE: Departments of Microbiology, Kanagawa, Japan
SOURCE: Journal of Infectious Diseases (2000), 181(Suppl. 3), S524-S527
CODEN: JIDIAQ; ISSN: 0022-1899
PUBLISHER: University of Chicago Press
DOCUMENT TYPE: Journal
LANGUAGE: English
AB **Chlamydia** pneumoniae is a widespread pathogen of the respiratory tract that is also assocd. with atherosclerosis. The whole genome sequence was detd. for a Japanese isolate, **C. pneumoniae** strain J138. The sequence predicted a variety of genes encoding outer membrane proteins (OMPs) including ompA and porB, another 10 predicted omp genes, and 27 pmp genes. All were detected in the whole genome sequence of strain CWL029, a strain isolated and sequenced in the United States. A comparative study of the OMPs of the two strains revealed a nucleotide sequence identity of 89.6-100% (deduced amino acid sequence identity, 71.1-100%). The overall genomic organization and location of genes are identical in both strains. Thus, a few unique sequences of the OMPs may be essential for specific attributes that define the differential biol. of two **C. pneumoniae** strains.
IT **223702-83-8**
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(amino acid sequence; comparison of outer membrane protein genes omp and pmp in the whole genome sequences of **Chlamydia** pneumoniae isolates from Japan and the United States)
REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:225326 CAPLUS
DOCUMENT NUMBER: 132:246932
TITLE: Genome sequences of Chlamydia trachomatis MoPn

and Chlamydia pneumoniae AR39

AUTHOR(S): Read, T. D.; Brunham, R. C.; Shen, C.; Gill, S. R.; Heidelberg, J. F.; White, O.; Hickey, E. K.; Peterson, J.; Utterback, T.; Berry, K.; Bass, S.; Linher, K.; Weidman, J.; Khouri, H.; Craven, B.; Bowman, C.; Dodson, R.; Gwinn, M.; Nelson, W.; DeBoy, R.; Kolonay, J.; McClarty, G.; Salzberg, S. L.; Eisen, J.; Fraser, C. M.

CORPORATE SOURCE: The Institute for Genomic Research, Rockville, MD, 20850, USA

SOURCE: Nucleic Acids Research (2000), 28(6), 1397-1406
CODEN: NARHAD; ISSN: 0305-1048

PUBLISHER: Oxford University Press

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The genome sequences of Chlamydia trachomatis mouse pneumonitis (MoPn, Chlamydia muridarum) strain Nigg (1,069,412 nucleotides) and Chlamydia pneumoniae strain AR39 (Chlamydophila pneumonia) (1,229,853 nucleotides) were detd. using a random shotgun strategy. The MoPn genome exhibited a general conservation of gene order and content with the previously sequenced C. trachomatis serovar D. Differences between C. trachomatis strains were focused on an .apprx.50-kb "plasticity zone" near the termination origins. In this region MoPn contained 3 copies of a novel gene encoding a >3000-amino-acid toxin homologous to a predicted toxin from Escherichia coli 0157:H7 but had apparently lost the tryptophan biosynthesis genes found in serovar D in this region. The C. pneumoniae AR39 chromosome was >99.9% identical to the previously sequenced C. pneumoniae CWL029 genome; however, comparative anal. identified an invertible DNA segment upstream of the uridine kinase gene which was in different orientations in the two genomes. AR39 also contained a novel 4524-nucleotide circular single-stranded (ss)DNA bacteriophage, the first time a virus has been reported infecting C. pneumoniae. Although the chlamydial genomes were highly conserved, there were intriguing differences in key nucleotide salvage pathways: C. pneumoniae has a uridine kinase gene for dUTP prodn., MoPn has a uracil phosphororibosyltransferase, while C. trachomatis serovar D contains neither gene. Chromosomal comparison revealed that there had been multiple large inversion events since the species divergence of C. trachomatis and C. pneumoniae, apparently oriented around the axis of the origin of replication and the termination region. The striking synteny of the Chlamydia genomes and prevalence of tandemly duplicated genes are evidence of minimal chromosome rearrangement and foreign gene uptake, presumably owing to the ecol. isolation of the obligate intracellular parasites. In the absence of genetic anal., comparative genomics will continue to provide insight into the virulence mechanisms of these important human pathogens.

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:635486 CAPLUS

DOCUMENT NUMBER: 131:270948

TITLE: Peptides based on a region of **myosin** capable of modulating inflammatory heart disease

INVENTOR(S): Bachmaier, Kurt; Hessel, Andrew John; Neu,

Nickolaus; Penninger, Josef Martin
PATENT ASSIGNEE(S): Amgen Canada Inc., Can.
SOURCE: U.S., 17 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5962636	A	19991005	US 1998-133774	19980812
US 6034230	A	20000307	US 1999-303862	19990503
WO 2000009692	A1	20000224	WO 1999-US18367	19990812

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9957740	A1	20000306	AU 1999-57740	19990812

PRIORITY APPLN. INFO.: US 1998-133774 A1 19980812
WO 1999-US18367 W 19990812

AB Disclosed are novel peptides that modulate inflammatory heart disease. Also disclosed are DNA mols. encoding the peptides, and methods of making the peptides. Vaccines for decreasing inflammatory cardiomyopathy comprise a peptide, an adjuvant, and an excipient. A peptide from a region of the murine .alpha.-**myosin** heavy chain induced autoimmune inflammatory cardiomyopathy in mice. A second peptide derived from a homologous region of the murine .beta.-**myosin** heavy chain did not induce the disease. When both peptides were injected simultaneously into mice, the mice did not develop the disease.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:216816 CAPLUS
DOCUMENT NUMBER: 130:321465
TITLE: Comparative genomes of **Chlamydia** pneumoniae and C. trachomatis
AUTHOR(S): Kalman, Sue; Mitchell, Wayne; Marathe, Rekha; Lammel, Claudia; Fan, Jun; Hyman, Richard W.; Olinger, Lynn; Grimwood, Jane; Davis, Ronald W.; Stephens, Richard S.
CORPORATE SOURCE: Stanford DNA Sequencing and Technology, Center, Stanford University, Stanford, CA, 94305, USA
SOURCE: Nature Genetics (1999), 21(4), 385-389
CODEN: NGENEC; ISSN: 1061-4036
PUBLISHER: Nature America
DOCUMENT TYPE: Journal
LANGUAGE: English

AB **Chlamydia** are obligate intracellular eubacteria that are phylogenetically sepd. from other bacterial divisions. C.

trachomatis and **C. pneumoniae** are both pathogens of humans but differ in their tissue tropism and spectrum of diseases. **C. pneumoniae** is a newly recognized species of **Chlamydia** that is a natural pathogen of humans, and causes pneumonia and bronchitis. In the United States, approx. 10% of pneumonia cases and 5% of bronchitis cases are attributed to **C. pneumoniae** infection. Chronic disease may result following respiratory-acquired infection, such as reactive airway disease, adult-onset asthma and potentially lung cancer. In addn., **C. pneumoniae** infection has been assocd. with atherosclerosis. C. trachomatis infection causes trachoma, an ocular infection that leads to blindness, and sexually transmitted diseases such as pelvic inflammatory disease, chronic pelvic pain, ectopic pregnancy and epididymitis. Although relatively little is known about C. trachomatis biol., even less is known concerning **C. pneumoniae**. Comparison of the **C. pneumoniae** genome with the C. trachomatis genome will provide an understanding of the common biol. processes required for infection and survival in mammalian cells. Genomic differences are implicated in the unique properties that differentiate the two species in disease spectrum. Anal. of the 1,230,230-nt **C. pneumoniae** genome revealed 214 protein-coding sequences not found in C. trachomatis, most without homologues to other known sequences. Prominent comparative findings include expansion of a novel family of 21 sequence-variant outer-membrane proteins, conservation of a type-III secretion virulence system, three serine/threonine protein kinases and a pair of parologous phospholipase-D-like proteins, addnl. purine and biotin biosynthetic capability, a homolog for arom. amino acid (tryptophan) hydroxylase and the loss of tryptophan biosynthesis genes.

IT **223702-83-8**
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(amino acid sequence; comparative genomes of **Chlamydia** pneumoniae and C. trachomatis)

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:164122 CAPLUS
DOCUMENT NUMBER: 130:324289
TITLE: **Chlamydia** infections and heart disease linked through antigenic mimicry
AUTHOR(S): Bachmaier, Kurt; Neu, Nikolaus; De La Maza, Luis M.; Pal, Sukumar; Hessel, Andrew; Penninger, Josef M.
CORPORATE SOURCE: Amgen Institute, Ontario Cancer Institute, University of Toronto, Toronto, ON, MSG 2C1, Can.
SOURCE: Science (Washington, D. C.) (1999), 283(5406), 1335-1339
CODEN: SCIEAS; ISSN: 0036-8075
PUBLISHER: American Association for the Advancement of Science
DOCUMENT TYPE: Journal
LANGUAGE: English
AB **Chlamydia** infections are epidemiol. linked to human heart

disease. A peptide from the murine heart muscle-specific .alpha. **myosin** heavy chain that has sequence homol. to the 60-kDa cysteine-rich outer membrane proteins of **Chlamydia** pneumoniae, C. psittaci, and C. trachomatis was shown to induce autoimmune inflammatory heart disease in mice. Injection of the homologous **Chlamydia** peptides into mice also induced perivascular inflammation, fibrotic changes, and blood vessel occlusion in the heart, as well as triggering T and B cell reactivity to the homologous endogenous heart muscle-specific peptide. **Chlamydia** DNA functioned as an adjuvant in the triggering of peptide-induced inflammatory heart disease. Infection with C. trachomatis led to the prodn. of autoantibodies to heart muscle-specific epitopes. Thus, **Chlamydia**-mediated heart disease is induced by antigenic mimicry of a heart muscle-specific protein.

REFERENCE COUNT: 65 THERE ARE 65 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1997:318194 CAPLUS
DOCUMENT NUMBER: 126:289020
TITLE: Muscle-specific expression vectors using the creatine kinase promoter and enhancer for expression of therapeutic genes
INVENTOR(S): Ricigliano, Joseph W.; Araneo, Barbara A.
PATENT ASSIGNEE(S): Paradigm Biosciences, Inc., USA
SOURCE: PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9711190	A2	19970327	WO 1996-US14829	19960919
WO 9711190	A3	19970626		
W: AL, AM, AU, BB, BG, BR, CA, CN, CU, CZ, EE, FI, GE, HU, IL, IS, JP, KG, KP, KR, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5795872	A	19980818	US 1995-530529	19950919
AU 9671602	A1	19970409	AU 1996-71602	19960919
AU 710756	B2	19990930		
EP 851935	A2	19980708	EP 1996-933030	19960919
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 11512297	T2	19991026	JP 1996-512813	19960919
US 6310196	B1	20011030	US 1998-119264	19980720

PRIORITY APPLN. INFO.: US 1995-530529 A 19950919
WO 1996-US14829 W 19960919

AB Expression vectors using muscle-specific regulatory elements including promoters and enhancers to drive expression of therapeutic genes in muscle are described. These constructs can be used to

drive expression of therapeutic genes (sense or antisense) or in vector vaccines in which they drive expression of genes for antigens or epitopes. The vector can also be used to drive expression of genes for proteins that circulate in the blood. The vector uses the promoter and enhancer of the muscle-specific creatine kinase of mouse. The utility of the system in vector vaccines is demonstrated using the glycoprotein gD-2 gene of herpesvirus 2. Mice inoculated with a sense expression vector synthesized the protein in muscle. When challenged with the virus, the transgenic mice showed a slower increase in viral titers and development of the disease than did control mice.

IT **51845-53-5**, Kinase (phosphorylating), **myosin** light-chain
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(muscle-specific regulatory elements of gene for; muscle-specific expression vectors using creatine kinase promoter and enhancer for expression of therapeutic genes)

L3 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1997:165250 CAPLUS
DOCUMENT NUMBER: 126:154826
TITLE: Functional surrogates of analytes of interest and methods of obtaining and using same
INVENTOR(S): Lee-Own, F. Victor; Carter, John Mark
PATENT ASSIGNEE(S): Cytogen Corporation, USA
SOURCE: PCT Int. Appl., 154 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9641172	A1	19961219	WO 1996-US10498	19960607
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN				
AU 9662826	A1	19961230	AU 1996-62826	19960607
PRIORITY APPLN. INFO.:			US 1995-476375	19950607
			WO 1996-US10498	19960607

AB Functional surrogates are disclosed which serve as mimics of naturally occurring mols., such as analytes of interest present in a given sample. In particular, functional surrogates (including epitopes and mimetopes) of macromol. moieties, including large to medium-sized proteins, are described. The functional surrogates of the present invention are useful in a variety of diagnostic, prophylactic, and therapeutic applications. Indeed, where the detection of a macromol. moiety is hampered by its size, a functional surrogate of the present invention, serving as the mimic of the macromol. moiety, may be better suited for a given diagnostic assay. Methods of obtaining functional surrogates, various methods of their use, and compns., including kits, are also described. Accordingly, certain binding peptides, including those of a

well-defined sequence, have been discovered, which can be used in a no. of affinity assays, including those utilizing fluorescence polarization immunoassay (FPIA), enzyme multiplied immunoassay technique (EMIT), or cloned enzyme donor immunoassays (CEDIA), to name a few.

(FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO' ENTERED AT 14:25:29 ON 15 MAY 2002)
L4 15 S L3
L5 11 DUP REM L4 (4 DUPLICATES REMOVED)

L5 ANSWER 1 OF 11 WPIDS (C) 2002 THOMSON DERWENT
ACCESSION NUMBER: 2001-648558 [74] WPIDS
DOC. NO. NON-CPI: N2001-484574
DOC. NO. CPI: C2001-191445
TITLE: Novel **Chlamydia myosin** heavy chain homolog polypeptide and polynucleotide for preventing, detecting and treating **Chlamydia** infections in mammals, in particular humans.
DERWENT CLASS: B04 D16 S03
INVENTOR(S): DUNN, P; MURDIN, A D; OOMEN, R P; WANG, J
PATENT ASSIGNEE(S): (AVET) AVENTIS PASTEUR LTD
COUNTRY COUNT: 95
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2001075113	A2	20011011	(200174)*	EN	83

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2001048177 A 20011015 (200209)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001075113	A2	WO 2001-CA461	20010404
AU 2001048177	A	AU 2001-48177	20010404

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001048177	A Based on	WO 200175113

PRIORITY APPLN. INFO: US 2000-194475P 20000404
AN 2001-648558 [74] WPIDS
AB WO 200175113 A UPAB: 20011217
NOVELTY - An isolated **myosin** heavy chain homolog polypeptide (I) from **Chlamydia**, especially **C. pneumoniae** having a 254 residue amino acid sequence (S1), fully defined in the specification, its immunogenic fragment

comprising at least 12 consecutive amino acids or a polypeptide which has been modified without loss of immunogenicity and which has 75 % sequence identity to (I), is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a nucleic acid molecule (II) comprising a nucleic acid sequence chosen from a sequence which encodes (I), a 965 base pair sequence (S2), fully defined in the specification, a sequence which encodes a polypeptide encoded by (S2), a sequence comprising 38 consecutive nucleotides from (II) and a sequence which encodes a polypeptide which is 75 % identical in amino acid sequence to the polypeptide encoded by (S2);

(2) a nucleic acid molecule (III) comprising a nucleic acid sequence which is anti-sense to (II);

(3) a fusion protein (IV) comprising (I) and a second polypeptide;

(4) a nucleic acid molecule (V) comprising a nucleic acid sequence which encodes (IV);

(5) a nucleic acid molecule chosen from (II), (III) and (V) operatively linked to one or more expression control sequences;

(6) a vaccine (VI), comprising:

(a) a vaccine vector and (II), (III) or (V), where each nucleic acid is capable of being expressed and the vaccine optionally comprises a second nucleic acid encoding and capable of expressing an additional polypeptide which enhances the immune response to the polypeptide expressed by the nucleic acids; or

(b) (I) or (IV), optionally comprising an additional polypeptide which enhances the immune response to (I) or (IV);

(7) a unicellular host (VII) transformed with (II), (III) or (V);

(8) an isolated nucleic acid probe of 5-100 nucleotides which hybridizes under stringent conditions to (II), its complement or anti-sense sequence;

(9) an isolated primer of 10-40 nucleotides which hybridizes under stringent conditions to (II), its complement or anti-sense sequence;

(10) a polypeptide encoded by (II) or (V);

(11) producing (I) or (IV), comprising culturing (VII);

(12) an antibody (VIII) against (I) or (IV);

(13) a pharmaceutical composition (IX) comprising (II), (III), (V), (I), (VI) or (VIII);

(14) a diagnostic kit comprising instructions for use and (II), (III), (V), (I), (IV) or (VIII);

(15) identifying (I) or (IV) which induces an immune response effective to prevent or lessen the severity of **Chlamydia** infection in a mammal previously immunized with polypeptide, by immunizing a mouse with (I) or (IV) and inoculating the immunized mouse with **Chlamydia**, where (I) or (IV) which prevents or lessens the severity of **Chlamydia** infection in the immunized mouse compared to a non-immunized control mouse is identified;

(16) expression plasmid pCACPNM559 containing the **myosin** heavy chain homolog gene, as shown in the specification;

(17) a nucleic acid molecule of sequence (S7); and

(18) a peptide having the sequence (S8).

(S7) is ATAAGAATGCGGCCGCCACCATGCATGACGCACTTCTAAGCA or GCGCCGGATCCCTACAGCTGCGCGACGACGACG.

(S8) is ArgValLysLysGluHisGlnLysGluLeu, LysMetAspGluPheAsnAlaLeuThr, TrpGlnGluSerGlnValAsnAlaGlnGluAsnSerThr AlaLysArgArgArgArgArg, AlaLeuLeuGluGlnArgThrGluLeu or IleLeuTyrTrpGlnGluSerGlnVal.

ACTIVITY - Antibiotic.

MECHANISM OF ACTION - Vaccine.

The effect of **C. pneumoniae myosin** heavy chain homolog gene in protecting mice against an intranasal challenge of **C. pneumoniae** was studied. Strain AR-39 was used in Balb/c mice as a challenge infection model to examine the capacity of **Chlamydia** gene products delivered as naked DNA to elicit a protective response against a sublethal **C. pneumoniae** lung infection. Protective immunity was defined as an accelerated clearance of pulmonary infection. Groups of 7-9 week old male Balb/c mice were immunized intramuscularly (i.m.) plus intranasally (i.n.) with plasmid DNA containing the **C. pneumoniae myosin** heavy chain homolog gene (pCACPNM559). Saline or the plasmid vector lacking an inserted chlamydial gene was given to groups of control animals. For i.m. immunization, alternate left and right quadriceps were injected with 100 micro g of DNA in 50 micro l of phosphate buffered saline (PBS) on three occasions at 0, 3 and 6 weeks. For i.n. immunization, anesthetized mice were aspirated 50 micro l of PBS containing 50 micro g DNA on three occasions at 0, 3 and 6 weeks. At week 8, immunized mice were inoculated i.n. with 5 multiply 105 infection forming units (IFU) of **C. pneumoniae**, strain AR39 in 100 micro l of SPG buffer to test their ability to limit the growth of a sublethal **C. pneumoniae** challenge. Lungs were taken from mice at day 9 post-challenge and immediately homogenized. Dilutions of the homogenate were assayed for the presence of infectious **Chlamydia**. The results showed that the mice immunized i.n. and i.m. with pCACPNM559 had chlamydial lung titers less than 49000 in 5 of 6 cases at day 9 and for control mice sham immunized with saline the value was 53100-315200 IFU/lung at day 9.

USE - (I)-(V) and (VIII) are useful for detecting **Chlamydia** infection by assaying a body fluid of a mammal with the components. (VI) and (IX) are useful for preventing and treating **Chlamydia** infection (claimed), in mammals, such as humans. The nucleic acid molecules are useful for producing (I), in the construction of vaccine vectors such as poxviruses, which are further useful for preventing and/or treating **Chlamydia** infection and in the construction of attenuated **Chlamydia** strains that can over-express the nucleic acid molecules or express it in a non-toxic, mutated form. (VI) is effective in preventing and/or treating **Chlamydia** infection for e.g. infection caused by C. trachomatis, C. psittaci, **C. pneumoniae** or C. pecorum. Probes which hybridize to (II) are useful in diagnostic tests, as capture of detection probes. (VIII) is useful in affinity chromatography for purifying (I) and in prophylactic or therapeutic passive immunization methods.

Dwg.0/4

L5 ANSWER 2 OF 11 WPIDS (C) 2002 THOMSON DERWENT
ACCESSION NUMBER: 2001-648556 [74] WPIDS
DOC. NO. NON-CPI: N2001-484572
DOC. NO. CPI: C2001-191443
TITLE: Novel isolated **myosin** heavy chain

polypeptide from **Chlamydia** pneumoniae and polynucleotides encoding them, useful for treating or preventing **Chlamydia** infection in mammals.

DERWENT CLASS: B04 D16 S03
INVENTOR(S): DUNN, P; MURDIN, A D; OOMEN, R P; WANG, J
PATENT ASSIGNEE(S): (AVET) AVENTIS PASTEUR LTD
COUNTRY COUNT: 95
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2001075111	A2	20011011	(200174)*	EN	83

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2001048172 A 20011015 (200209)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001075111	A2	WO 2001-CA456	20010404
AU 2001048172	A	AU 2001-48172	20010404

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2001048172	A	Based on	WO 200175111

PRIORITY APPLN. INFO: US 2000-194471P 20000404
AN 2001-648556 [74] WPIDS
AB WO 200175111 A UPAB: 20011217
NOVELTY - An isolated **myosin** heavy chain polypeptide (I) from **Chlamydia** pneumoniae, comprising 168 residue amino acid sequence (S2), fully defined in the specification, an immunogenic fragment having 12 consecutive amino acids of (S2), or a sequence of (S2) or its fragment which has been modified without loss of immunogenicity and having 75 % identity to above mentioned polypeptide sequences, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a nucleic acid molecule (II) comprising a nucleic acid sequence which encodes (I), comprising:

(a) a 707 nucleotide sequence (S1), fully defined in specification;

(b) a sequence which encodes a polypeptide encoded by (S1);

(c) a sequence comprising at least 38 consecutive nucleotides of (a) or (b), or a sequence which encodes a polypeptide that is 75 % identical in amino acid sequence to polypeptide encoded by (S1);

(2) a nucleic acid molecule (III) comprising a nucleic acid sequence which is antisense to (II);

(3) a nucleic acid molecule (IV) comprising a nucleic acid

sequence which encodes fusion protein that comprises a polypeptide encoded by (II) and a second polypeptide;

(4) a nucleic acid molecule ((I)-(IV)) operatively linked to one or more expression control sequences;

(5) a vaccine (V) comprising a vaccine vector and (II);

(6) a vaccine (VI) comprising a vaccine vector and at least one first nucleic acid encoding a fusion protein that comprises a polypeptide encoded by (S1), a polypeptide encoded by a nucleic acid comprising at least 38 consecutive nucleotides from (S1), a polypeptide which is 75 % identical to the amino acid sequence to the polypeptide encoded by (S1), or is (I); and

(7) a vaccine (VII) comprising (II), (III), or (V) operatively linked to expression control sequences, as first nucleic acid and a vaccine vector, the vaccine optionally comprises a second nucleic acid encoding an additional polypeptide which enhances the immune response to the polypeptide expressed by the first;

(8) a unicellular host (VIII) transformed with a nucleic acid molecule ((II)-(IV)) operatively linked to expression control sequences;

(9) an isolated nucleic acid probe (IX) of 5-100 nucleotides which hybridizes under stringent conditions to (S1);

(10) an isolated primer (X) of 10-40 nucleotides which hybridizes under stringent conditions to (S1);

(11) a polypeptide encoded by (II), (III), (IV) or a nucleic acid molecule ((II)-(IV)) operatively linked to expression control sequences;

(12) a fusion protein (XI) comprising (I) and a second polypeptide;

(13) preparation of (I) or (XI);

(14) an antibody (XII) against (I) or (XI);

(15) a vaccine (XIII) comprising at least one first polypeptide (FP1) encoded by (S1), a polypeptide encoded by a nucleic acid comprising at least 38 consecutive nucleotides of (S1), a polypeptide which is 75 % identical to the amino acid sequence to the polypeptide encoded by (S1), or is (I), where the vaccine optionally comprises an additional polypeptide which enhances the immune response to FP1;

(16) a vaccine (XIV) comprising a fusion protein which comprises FP1 and a second polypeptide, where the vaccine optionally comprises an additional polypeptide which enhances the immune response to FP1;

(17) a vaccine (XV) comprising (I) or (XI) as the first polypeptide, and an additional polypeptide which enhances the immune response to the first polypeptide;

(18) a diagnostic kit comprising instructions for use and a component (II), (III), (V) operatively linked to expression control sequences, (I), (XI) or (XII);

(19) identifying (I) or (XI) which prevents or lessens the severity of **Chlamydia** infection in a mammal previously immunized with polypeptide involves immunizing a mouse with the polypeptide or fusion protein and inoculating the immunized mouse with **Chlamydia**;

(20) expression plasmid pCACPNM760;

(21) a nucleic acid molecule having a sequence (S7); and

(22) a peptide having a sequence (S8).

(S7) is ataagaatgcggccgccaccatggcaaaatatccactagagcc or gcgccggatcccgcttccccctgattcacg.

(S8) is LysArgArgLysGluGluGluLysThrArgLeuHisLysGluGluTrpMet,

LeuArgGlnLysLysLysArgGluSerGlyGlySer or GlnLeuSerGluGluGluGluLysVal.

ACTIVITY - Antibiotic.

MECHANISM OF ACTION - Vaccine.

Strain AR-39 was used in Balb/c mice as a challenge infection model to examine the capacity of Chlamydia gene products delivered as naked DNA to elicit a protective response against sublethal C. pneumoniae lung infections. Groups of 7-9 week old male Balb/c mice were immunized intramuscularly (i.m.) plus intranasally (i.n.) with plasmid DNA containing the C. pneumoniae myosin heavy chain gene. For i.m. immunization, alternate left and right quadriceps were injected with 100 micro g of DNA. For i.n. immunization, anesthetized mice were aspirated 50 micro l of phosphate buffered saline (PBS) containing 50 micro g DNA on three occasions at 0, 3 and 6 weeks. At week 8, immunized mice were inoculated i.n. with 5 multiply 105 infection forming units (IFU) of C. pneumoniae, strain AR39 in 100 micro l of SPG buffer to test their ability to limit the growth of a sublethal C. pneumoniae challenge. Lungs were taken from mice at day 9 post-challenge and homogenized in SPG buffer. Dilutions of the homogenate were assayed for Chlamydia by inoculation onto monolayers of susceptible cells. The inoculum was centrifuged onto the cells, then the cells were incubated for three days at 35 deg. C in the presence of 1 micro g/ml cycloheximide. After incubation the monolayers were fixed and stained using convalescent sera from rabbits infected with C. pneumoniae. Results showed that mice immunized with i.n. and i.m. with pCACPNM760 had chlamydial lung titers less than 40000 in 3 of 6 cases at day 9, whereas the range of values for control mice sham immunized with saline was 20800-323300 IFU/lung at day 9.

USE - (II), (III), (IV) or a nucleic acid molecule ((II), (III), (V)) operatively linked to expression control sequences, the vaccines and pharmaceutical compositions are useful for treating or preventing Chlamydia infection. (II), (III), (IV) or a nucleic acid molecule ((II)-(IV)) operatively linked to expression control sequences, (I), (XI) or (XII) is also useful for detecting Chlamydia infection. (All claimed). (I) is useful for detecting the presence of anti-Chlamydia antibodies in a biological sample. (II) is useful for producing (I), for constructing vaccine vectors, and as a vaccine agent, or in the construction of attenuated Chlamydia strains that can overexpress (II). (IX) is useful as capture or detection probe. (IX) and (X) are useful for detecting and/or identifying the presence of Chlamydia in a biological material. (XII) is useful for purifying (I) by antibody-based affinity chromatography. (XII) can also be used in therapeutic and prophylactic passive immunization methods. (XII) used for detecting Chlamydia in biological sample.

Dwg.0/4

L5 ANSWER 3 OF 11 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

ACCESSION NUMBER: 2000:397430 BIOSIS

DOCUMENT NUMBER: PREV200000397430

TITLE: Ultrastructure of Rickettsia rickettsii actin tails and localization of cytoskeletal proteins.

AUTHOR(S): Van Kirk, Levi S.; Hayes, Stanley F.; Heinzen, Robert A. (1)

CORPORATE SOURCE: (1) Department of Molecular Biology, University of Wyoming, Laramie, WY, 82071-3944 USA

SOURCE: Infection and Immunity, (August, 2000) Vol. 68, No. 8, pp. 4706-4713. print.

ISSN: 0019-9567.
DOCUMENT TYPE: Article
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Actin-based motility (ABM) is a mechanism for intercellular spread that is utilized by vaccinia virus and the invasive bacteria within the genera Rickettsia, Listeria, and Shigella. Within the Rickettsia, ABM is confined to members of the spotted fever group (SFG), such as Rickettsia rickettsii, the agent of Rocky Mountain spotted fever. Infection by each agent induces the polymerization of host cell actin to form the typical F (filamentous)-actin comet tail. Assembly of the actin tail propels the pathogen through the host cytosol and into cell membrane protrusions that can be engulfed by neighboring cells, initiating a new infectious cycle. Little is known about the structure and morphogenesis of the Rickettsia rickettsii actin tail relative to Shigella and Listeria actin tails. In this study we examined the ultrastructure of the rickettsial actin tail by confocal, scanning electron, and transmission electron microscopy. Confocal microscopy of rhodamine phalloidin-stained infected Vero cells revealed the typhus group rickettsiae, Rickettsia prowazekii and Rickettsia typhi, to have no actin tails and short (apprx1- to 3-mum) straight or hooked actin tails, respectively. The SFG rickettsia, R. rickettsii, displayed long actin tails (>10 mum) that were frequently comprised of multiple, distinct actin bundles, wrapping around each other in a helical fashion. Transmission electron microscopy, in conjunction with **myosin** S1 subfragment decoration, revealed that the individual actin filaments of R. rickettsii tails are >1 mum long, arranged roughly parallel to one another, and oriented with the fast-growing barbed end towards the rickettsial pole. Scanning electron microscopy of intracellular rickettsiae demonstrated R. rickettsii to have polar associations of cytoskeletal material and R. prowazekii to be devoid of cytoskeletal interactions. By indirect immunofluorescence, both R. rickettsii and Listeria monocytogenes actin tails were shown to contain the cytoskeletal proteins vasodilator-stimulated phosphoprotein profilin, vinculin, and filamin. However, rickettsial tails lacked ezrin, paxillin, and tropomyosin, proteins that were associated with actin tails of cytosolic or protrusion-bound Listeria. The unique ultrastructural and compositional characteristics of the R. rickettsii actin tail suggest that rickettsial ABM is mechanistically different from previously described microbial ABM systems.

L5 ANSWER 4 OF 11 MEDLINE DUPLICATE 1
ACCESSION NUMBER: 2000397177 MEDLINE
DOCUMENT NUMBER: 20298980 PubMed ID: 10839747
TITLE: Review of microbial infections and the immune response to cardiac antigens.
AUTHOR: Penninger J M; Bachmaier K
CORPORATE SOURCE: Amgen Institute, Ontario Cancer Institute, and Department of Medical Biophysics, University of Toronto, Toronto, Ontario M5G 2C1, Canada.. jpenning@amgen.com
SOURCE: JOURNAL OF INFECTIOUS DISEASES, (2000 Jun) 181 Suppl 3 S498-504. Ref: 41
Journal code: IH3; 0413675. ISSN: 0022-1899.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)

General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 200008
ENTRY DATE: Entered STN: 20000824
Last Updated on STN: 20000824
Entered Medline: 20000811

AB Heart disease is the most prevalent cause of morbidity and mortality in rich countries. Multiple pathogens are epidemiologically linked to human heart disease, and autoinflammatory responses to heart-specific epitopes revealed to the host's immune system (e.g., due to the cytopathic effects of cardiotropic viruses) or attacked by autoaggresive lymphocytes activated by mimicking peptides present in bacteria may be causative in the pathogenesis of chronic inflammatory cardiomyopathy. The experimental system of murine chronic autoimmune myocarditis has been used to analyze aspects of the host immune response. This review presents insights gained by use of this murine model system into molecular mechanisms governing activation of autoaggressive lymphocytes, target organ susceptibility, and cardiopathogenic epitope mapping and discusses mimicking endogenous epitopes found in pathogens.

L5 ANSWER 5 OF 11 MEDLINE
ACCESSION NUMBER: 1999174464 MEDLINE
DOCUMENT NUMBER: 99174464 PubMed ID: 10084921
TITLE: **Chlamydia** protein linked to heart disease.
COMMENT: Comment on: Science. 1999 Feb 26;283(5406):1335-9
AUTHOR: Gura T
SOURCE: SCIENCE, (1999 Feb 26) 283 (5406) 1238-9.
Journal code: UJ7; 0404511. ISSN: 0036-8075.
PUB. COUNTRY: United States
Commentary
News Announcement
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199903
ENTRY DATE: Entered STN: 19990326
Last Updated on STN: 19990326
Entered Medline: 19990312

L5 ANSWER 6 OF 11 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1999:366034 BIOSIS
DOCUMENT NUMBER: PREV199900366034
TITLE: Autoimmune reaction links **chlamydia** to heart disease.
AUTHOR(S): Berger, A.
SOURCE: BMJ, (March 6, 1999) Vol. 318, No. 7184, pp. 625.
ISSN: 0959-8138.
DOCUMENT TYPE: News Announcement
LANGUAGE: English

AB Canadian researchers say **chlamydia** infection can cause heart disease by triggering the production of antibodies that attack the body's **myosin**.

L5 ANSWER 7 OF 11 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1999:340831 BIOSIS
DOCUMENT NUMBER: PREV199900340831

TITLE: A comparative study of the actin-based motilities of the pathogenic bacteria: Listeria monocytogenes, Shigella flexneri and Rickettsia conorii.
AUTHOR(S): Gouin, E.; Gantelet, H.; Egile, C.; Lasa, I.; Ohayon, H.; Villiers, V.; Gounon, P.; Sansonetti, P. J.; Cossart, P. (1)
CORPORATE SOURCE: (1) Unite des Interactions Bacteries-Cellules, Institut Pasteur, 25 and 28 Rue du Dr Roux, 75724, Paris Cedex 15 France
SOURCE: Journal of Cell Science, (June, 1999) Vol. 112, No. 11, pp. 1697-1708.
ISSN: 0021-9533.
DOCUMENT TYPE: Article
LANGUAGE: English
SUMMARY LANGUAGE: English

AB Listeria monocytogenes, Shigella flexneri, and Rickettsia conorii are three bacterial pathogens that are able to polymerize actin into 'comet tail' structures and move within the cytosol of infected cells. The actin-based motilities of L. monocytogenes and S. flexneri are known to require the bacterial proteins ActA and IcsA, respectively, and several mammalian cytoskeleton proteins including the Arp2/3 complex and VASP (vasodilator-stimulated phosphoprotein) for L. monocytogenes and vinculin and N-WASP (the neural Wiskott-Aldrich syndrome protein) for S. flexneri. In contrast, little is known about the motility of R. conorii. In the present study, we have analysed the actin-based motility of this bacterium in comparison to that of L. monocytogenes and S. flexneri. Rickettsia moved at least three times more slowly than Listeria and Shigella in both infected cells and Xenopus laevis egg extracts. Decoration of actin with the S1 subfragment of **myosin** in infectedcells showed that the comet tails of Rickettsia have a structure strikingly different from those of L. monocytogenes or S. flexneri. In Listeria and Shigella tails, actin filaments form a branching network while Rickettsia tails display longer and not cross-linked actin filaments. Immunofluorescence studies revealed that the two host proteins, VASP and alpha-actinin colocalized with actin in the tails of Rickettsia but neither the Arp2/3 complex which we detected in the Shigella actin tails, nor N-WASP, were detected in Rickettsia actin tails. Taken together, these results suggest that R. conorii may use a different mechanism of actin polymerization.

L5 ANSWER 8 OF 11 MEDLINE DUPLICATE 2
ACCESSION NUMBER: 1999157122 MEDLINE
DOCUMENT NUMBER: 99157122 PubMed ID: 10037605
TITLE: **Chlamydia** infections and heart disease linked through antigenic mimicry.
COMMENT: Comment in: Science. 1999 Feb 26;283(5406):1238-9
AUTHOR: Bachmaier K; Neu N; de la Maza L M; Pal S; Hessel A; Penninger J M
CORPORATE SOURCE: Amgen Institute, Ontario Cancer Institute, Departments of Medical Biophysics and Immunology, University of Toronto, Toronto, Ontario M5G 2C1, Canada.
SOURCE: SCIENCE, (1999 Feb 26) 283 (5406) 1335-9.
Journal code: UJ7; 0404511. ISSN: 0036-8075.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199903
ENTRY DATE: Entered STN: 19990326
Last Updated on STN: 19990326
Entered Medline: 19990312

AB **Chlamydia** infections are epidemiologically linked to human heart disease. A peptide from the murine heart muscle-specific alpha **myosin** heavy chain that has sequence homology to the 60-kilodalton cysteine-rich outer membrane proteins of **Chlamydia** pneumoniae, C. psittaci, and C. trachomatis was shown to induce autoimmune inflammatory heart disease in mice. Injection of the homologous **Chlamydia** peptides into mice also induced perivascular inflammation, fibrotic changes, and blood vessel occlusion in the heart, as well as triggering T and B cell reactivity to the homologous endogenous heart muscle-specific peptide. **Chlamydia** DNA functioned as an adjuvant in the triggering of peptide-induced inflammatory heart disease. Infection with C. trachomatis led to the production of autoantibodies to heart muscle-specific epitopes. Thus, **Chlamydia**-mediated heart disease is induced by antigenic mimicry of a heart muscle-specific protein.

L5 ANSWER 9 OF 11 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 2000:27741 BIOSIS
DOCUMENT NUMBER: PREV200000027741
TITLE: The actin-based motility of R. conorii: A novel type of actin-based motility.
AUTHOR(S): Gouin, Edith (1); Gantelet, Hubert (1); Egile, Coumaran (1); Lasa, Inigo (1); Villiers, Veronique (1); Gounon, Pierre (1); Sansonetti, Philippe (1); Cossart, Pascale (1)
CORPORATE SOURCE: (1) Institut Pasteur, Paris France
SOURCE: Molecular Biology of the Cell, (Nov., 1999) Vol. 10, No. SUPPL., pp. 138a.
Meeting Info.: 39th Annual Meeting of the American Society for Cell Biology Washington, D.C., USA December 11-15, 1999 The American Society for Cell Biology
. ISSN: 1059-1524.
DOCUMENT TYPE: Conference
LANGUAGE: English

L5 ANSWER 10 OF 11 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1998:507596 BIOSIS
DOCUMENT NUMBER: PREV199800507596
TITLE: Coxiella burnetii induces reorganization of the actin cytoskeleton in human monocytes.
AUTHOR(S): Meconi, Sonia; Jacomo, Veronique; Boquet, Patrice; Raoult, Didier; Mege, Jean-Louis; Capo, Christian (1)
CORPORATE SOURCE: (1) Unite des Rickettsies, CNRS ESA 6020, Fac. Med., 27 Bd J. Moulin, 13385 Marseille Cedex 05 France
SOURCE: Infection and Immunity, (Nov., 1998) Vol. 66, No. 11, pp. 5527-5533.
ISSN: 0019-9567.
DOCUMENT TYPE: Article
LANGUAGE: English
AB Coxiella burnetii, an obligate intracellular bacterium which

survives in myeloid cells, causes Q fever in humans. We previously demonstrated that virulent C. burnetii organisms are poorly internalized by monocytes compared to avirulent variants. We hypothesized that a differential mobilization of the actin cytoskeleton may account for this distinct phagocytic behavior. Scanning electron microscopy demonstrated that virulent C. burnetii stimulated profound and polymorphic changes in the morphology of THP-1 monocytes, consisting of membrane protrusions and polarized projections. These changes were transient, requiring 5 min to reach their maximum extent and vanishing after 60 min of incubation. In contrast, avirulent variants of C. burnetii did not induce any significant changes in cell morphology. The distribution of filamentous actin (F-actin) was then studied with a specific probe, bodipy phallacidin. Virulent C. burnetii induced a profound and transient reorganization of F-actin, accompanied by an increase in the F-actin content of THP-1 cells. F-actin was colocalized with **myosin** in cell protrusions, suggesting that actin polymerization and the tension of actin-**myosin** filaments play a role in C. burnetii-induced morphological changes. In addition, contact between the cell and the bacterium seems to be necessary to induce cytoskeleton reorganization. Bacterial supernatants did not stimulate actin remodeling, and virulent C. burnetii organisms were found in close apposition with F-actin protrusions. The manipulation of the actin cytoskeleton by C. burnetii may therefore play a critical role in the internalization strategy of this bacterium.

L5 ANSWER 11 OF 11 WPIDS (C) 2002 THOMSON DERWENT
ACCESSION NUMBER: 1997-077284 [07] WPIDS
DOC. NO. NON-CPI: N1997-064175
DOC. NO. CPI: C1997-024806
TITLE: Labelled functional surrogate of an analyte - useful as competitor molecule in affinity assays, esp. for detecting large macromolecules such as ferritin.
DERWENT CLASS: B04 D16 S03
INVENTOR(S): CARTER, J M; LEE-OWN, F V; LEE-OWEN, F V
PATENT ASSIGNEE(S): (CYTO-N) CYTOGEN CORP
COUNTRY COUNT: 70
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9641172	A1	19961219	(199707)*	EN	156
RW: AT BE CH DE DK EA ES FI FR GB GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG					
W: AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IL IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN					
AU 9662826	A	19961230	(199716)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9641172	A1	WO 1996-US10498	19960607
AU 9662826	A	AU 1996-62826	19960607

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9662826	A	Based on	WO 9641172

PRIORITY APPLN. INFO: US 1995-476375 19950607
AN 1997-077284 [07] WPIDS
AB WO 9641172 A UPAB: 19970212
New labelled conjugate (I) comprises at least one label attached to a functional surrogate of an analyte of interest (A) where the limiting amount of an affinity receptor for the analyte; (I) exhibits an activity that is altered upon interaction with the affinity receptor and this activity can be measured and related to the amount of (A) present in a sample. Methods of determining the presence of absence of an analyte (A) in a sample by using (I) in an affinity assay are claimed (see ''PREFERRED METHODS''). A functional surrogate (II) of an analyte of interest (A) and comprising a peptide having an immunoreactive group that allows the surrogate to compete effectively and (A) for a limiting amount of its affinity receptor is new.

USE - Functional surrogates are able to mimic naturally occurring analytes. They can be labelled for use in standard competitive affinity assays (esp. homogenous immunoassaysl kits provided) for detecting large macromolecules such as polypeptides, polysaccharides, polynucleotides, glycoproteins and lipid-containing macromolecules, as well as small haptens. Typical diagnostic analytes for detection include cardiac or tumour markers, allergens, hormones related to fertility-pregnancy or analytes associated with infectious disease. In particular, the assays are useful for detecting ferritin, follicle stimulating hormone, human growth hormone, immunoglobulin E, prolactin, parathyroid hormone, human placental lactogen, hepatitis antigens or antibodies against them, human chorionic gonadotropin, human luteinising hormone, cytomegalovirus, **Chlamydia**, Streptococcus a, rubella, toxoplasma, herpes virus, DK-MB, myoglobin, **myosin** light chain, troponin, carcinoembryonic antigen, alpha-fetoprotein, prostate-specific antigen and CA125 (a tumour market).

ADVANTAGE - Large macromolecular antigens (i.e. of mol. wt. greater than 100000 Da) which are difficult to detect using homogenous immunoassay techniques (e.g. due to scarcity, unavailability, undesirable size) can be detected more readily when the functional surrogates (mol. wt. less than 200 Da) are used as labelled competitors. Also, it is not necessary to know the sequence of the analyte because surrogates can be selected from a random library on th basis of affinity, rather than having to be designed based on sequence homology. Accordingly, previously unknown epitopes of an analyte can be identified.

Dwg.0/0

FILE 'CAPLUS' ENTERED AT 14:27:27 ON 15 MAY 2002
L6 6 S L1 AND PCACPNM?
L7 4 S L6 NOT L3

L7 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:833541 CAPLUS
DOCUMENT NUMBER: 135:367765
TITLE: **Chlamydia** antigens and corresponding

DNA fragments and their uses for DNA or immunogen vaccination against **Chlamydia** infection

INVENTOR(S): Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela

PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.

SOURCE: PCT Int. Appl., 355 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001085972	A2	20011115	WO 2001-CA653	20010508

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

US 2000-202672P	P	20000508
US 2000-207852P	P	20000530
US 2000-211796P	P	20000616
US 2000-211797P	P	20000616
US 2000-211798P	P	20000616
US 2000-211801P	P	20000616
US 2000-212044P	P	20000616
US 2000-235335P	P	20000926
US 2000-235361P	P	20000926
US 2000-235398P	P	20000926

AB The present invention provides ten nucleic acids, their encoded proteins, and vectors for a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically **C. pneumoniae**. The method employs a vector contg. a nucleotide sequence encoding a polypeptide of a strain of **Chlamydia** pneumoniae operably linked to a promoter to effect expression of the gene product in the host. The polypeptides are derived from **C. pneumoniae** and are selected from an ATP-binding cassette protein, a secretory locus ORF, an endopeptidase, a protease, a metalloprotease, CLP protease ATPase, a CLP protease subunit, a transglycosylase/transpeptidase, a CLPc protease, and thioredoxin. Modifications are possible within the scope of this invention.

L7 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:748010 CAPLUS

DOCUMENT NUMBER: 135:268380

TITLE: **Chlamydia** pneumoniae immunogenic transmembrane protein and its gene sequence and use for immunization against **Chlamydia**

infection
INVENTOR(S): Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela
PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.
SOURCE: PCT Int. Appl., 90 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001075114	A2	20011011	WO 2001-CA462	20010404

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-194477P P 20000404

AB The present invention provides nucleic acids, proteins and vectors for a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically **C. pneumoniae**. The transmembrane protein gene is amplified from **C. pneumonia** strain CWL029 by PCR and cloned into the pCA-Myc-His eukaryotic expression vector with transcription under control of the human cytomegalovirus promoter. The method employs a plasmid vector contg. a nucleotide sequence encoding a transmembrane protein of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the transmembrane protein gene product in the host. DNA immunization of mice with the plasmid vector achieves protection against an intranasal challenge of **C. pneumoniae**.

L7 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:748008 CAPLUS
DOCUMENT NUMBER: 135:284101
TITLE: **Chlamydia** pneumoniae immunogenic glutamate-binding protein and its gene sequence and use for immunization against **Chlamydia** infection
INVENTOR(S): Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela
PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.
SOURCE: PCT Int. Appl., 86 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001075112	A2	20011011	WO 2001-CA460	20010404
WO 2001075112	A3	20020228		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-194472P P 20000404

AB The present invention provides nucleic acids, proteins and vectors for a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically **C. pneumoniae**. The glutamate-binding protein gene is amplified from **C. pneumonia** strain CWLO29 by PCR and cloned into the pCA-Myc-His eukaryotic expression vector with transcription under control of the human cytomegalovirus promoter. The method employs a plasmid vector contg. a nucleotide sequence encoding a glutamate-binding protein of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the glutamate-binding protein gene product in the host. DNA immunization of mice with the plasmid vector achieves protection against an intranasal challenge of **C. pneumoniae**
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L7 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:747834 CAPLUS
DOCUMENT NUMBER: 135:302896
TITLE: **Chlamydia** antigens and corresponding DNA fragments and uses thereof
INVENTOR(S): Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela
PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.
SOURCE: PCT Int. Appl., 88 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001074863	A2	20011011	WO 2001-CA455	20010404

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH,

CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-194464P P 20000404

AB The present invention provides nucleic acids, proteins and vectors for a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically **C. pneumoniae**.
The method employs a vector contg. a nucleotide sequence encoding an ATP-binding cassette of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the ATP-binding cassette gene product in the host. Modifications are possible within the scope of this invention.

(FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO' ENTERED AT 14:29:53 ON 15 MAY 2002)

L8 7 S L6
L9 5 S L8 NOT L4
L10 5 DUP REM L9 (0 DUPLICATES REMOVED)

L10 ANSWER 1 OF 5 WPIDS (C) 2002 THOMSON DERWENT
ACCESSION NUMBER: 2002-049447 [06] WPIDS
DOC. NO. CPI: C2002-013964
TITLE: Vaccine useful for immunizing mammals against **chlamydia** infections, comprises vectors having sequences of ATP binding cassette gene, secretary locus open reading frame gene of **chlamydia**.
DERWENT CLASS: B04 C06 D16
INVENTOR(S): DUNN, P; MURDIN, A D; OOMEN, R P; WANG, J
PATENT ASSIGNEE(S): (AVET) AVENTIS PASTEUR LTD
COUNTRY COUNT: 96
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2001085972	A2	20011115	(200206)*	EN	355

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2001058105 A 20011120 (200219)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001085972	A2	WO 2001-CA653	20010508
AU 2001058105	A	AU 2001-58105	20010508

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2001058105	A	Based on	WO 200185972

PRIORITY APPLN. INFO: US 2000-235398P 20000926; US 2000-202672P 20000508; US 2000-207852P 20000530; US 2000-211796P 20000616; US 2000-211797P 20000616; US 2000-211798P 20000616; US 2000-211801P 20000616; US 2000-212044P 20000616; US 2000-235335P 20000926; US 2000-235361P 20000926

AN 2002-049447 [06] WPIDS

AB WO 200185972 A UPAB: 20020128

NOVELTY - A vaccine (I) comprising a vector having a sequence (SS) of ATP binding cassette gene, secretary locus open reading frame gene, endopeptidase gene, protease gene, metal or protease gene, CLP protease ATPase gene, CLP protease subunit gene, transglycolase/transpeptidase gene, CLPc protease gene, or thioredoxin gene of **Chlamydia** penumoniae, or a polypeptide (PP) encoded by the sequence, is new.

DETAILED DESCRIPTION - A vaccine (I) comprising a vector having a sequence (SS) of ATP binding cassette gene, secretary locus open reading frame gene, endopeptidase gene, protease gene, metal or protease gene, CLP protease ATPase gene, CLP protease subunit gene, transglycolase/transpeptidase gene, CLPc protease gene, or thioredoxin gene of **Chlamydia** penumoniae, or a polypeptide (PP) encoded by the sequence, is new. (I) comprising a vector has a sequence (SS) selected from:

(a) a 1787 (ATP binding cassette gene), 1226 (secretary locus open reading frame gene), 1232 (endopeptidase gene), 2060 (protease gene), 1133 (metal or protease gene), 1466 (CLP protease ATPase gene), 1812 (CLP protease subunit gene), 2162 (transglycolase/transpeptidase gene), 2738 (CLPc protease gene) or 509 (thioredoxin gene) base pair sequence (S1), all fully defined in the specification;

(b) a nucleic acid sequence which encodes a polypeptide encoded by (S1);

(c) a nucleic acid sequence (S2) which encodes a polypeptide which is at least 75 % identical to the polypeptide encoded by (S1);

(d) a nucleic acid sequence which encodes a 528, 341, 344, 619, 421, 203, 653, 845 or 102 residue amino acid sequence (S3), fully defined in the specification; and

(e) a nucleic acid sequence which has been modified to encode a modified polypeptide, where the modified polypeptide retains immunogenicity and is at least 75 % identical to the corresponding polypeptide encoded by (a), (b) or (d), where each of the nucleic acid is capable of being expressed.

Alternatively, (I) comprises a vector having:

(a) a nucleotide sequence comprising 36 consecutive nucleotides for (S1), a nucleotide sequence encoding an immunogenic fragment, comprising at least 12 consecutive amino acids from (S3), or a nucleotide sequence modified to encode a modified polypeptide having 75 % identity to amino acid sequence to the fragment of the above nucleotide sequences;

(b) a nucleotide sequence encoding a fusion protein comprising a first polypeptide encoded by (S1) or its fragment, and a second polypeptide;

(c) a fusion protein comprising PP or its fragments and a second polypeptide; or

(d) a nucleotide sequence encoding a polypeptide, or the polypeptide having one of 33 8-17 residue amino acid sequences (S5),

all fully defined in the specification.

(S5) is e.g. ValHisHisThrLeuArgGluSerTyrLysLysGlyThrProPro, TrpIleAlaGluTyrValSerProVal, LeuLeuIleGluAspMetThrLeuIle, LysLeuSerSerLeuIleProGlyLeu, or AlaIleTyrArpThrIleArgPheLeu.

INDEPENDENT CLAIMS are also included for the following:

(1) a pharmaceutical composition (PC) comprising (I) under carrier;

(2) a fusion protein (II) comprising PP or its fragments and a second polypeptide;

(3) an antibody (Ab) specific to (II);

(4) a commercial package comprising (SS) or its fragments, PP or its fragments, and instructions for use in eliciting an immune response in a mammal;

(5) expression plasmid **pCACPNM213**, **pCACPNM882**, **pCACPNM208**, **pCACPNM1096**, **pCACPNM1097**, **pCACPNM908**, **pCACPNM909**, **pCACPNM440**, **pCACPNM459** or **pCACPNM708**.

ACTIVITY - Antibacterial.

MECHANISM OF ACTION - Vaccine.

Groups of 7-9 week old male Balb/c mice were immunized intramuscularly plus intranasally with plasmid DNA namely **pCACPNM882** containing each of the **Chlamydia** pneumoniae protein gene anesthetized mice were aspirated 50 micro l of phosphate buffered saline (PBS) containing 50 micro g DNA on three occasions at 0, 3 and 6 weeks. At week 8, immunized mice were inoculated intranasally with 5 multiply 105 infection forming units (IFU) of **C. pneumoniae**, strain AR39 in 100 micro l of SPG buffer to test their ability to limit the growth of a sublethal **C. pneumoniae** challenge. Lungs were taken from mice at day 9 post-challenge and immediately homogenized in SPG buffer. The homogenase was stored frozen at -70 deg. C until assay. Dilutions of the homogenate were assayed for the presence of infectious **Chlamydia** by inoculation onto monolayers of susceptible cells. The results showed that mice immunized intranasally and intramuscularly with **pCACPNM882** had chlamydial lung titers less than 73000 in 4 of 6 cases at day 9 whereas the range of values for control mice sham immunized with saline was 56000-424000 IFU/lung at day 9. DNA immunization was not responsible for the observed protective effect since another plasmid DNA construct, **pCACPNM647**, failed to protect, with lung titers in immunized mice similar to those obtained for saline-immunized control mice.

USE - (I), (II) or Ab is useful for treating or preventing **Chlamydia** infection. (III) and (IV) is useful for diagnosing the presence of **Chlamydia** in a biological sample. Ab or (IV) is useful for purifying a polypeptide by antibody-based affinity chromatography.

Dwg.0/40

L10 ANSWER 2 OF 5 WPIDS (C) 2002 THOMSON DERWENT
ACCESSION NUMBER: 2001-648559 [74] WPIDS
DOC. NO. NON-CPI: N2001-484575
DOC. NO. CPI: C2001-191446
TITLE: Novel polypeptides from **Chlamydia** pneumoniae and genes encoding the polypeptide, useful for immunization of host e.g. human against disease caused by infection by a strain of **Chlamydia**.

DERWENT CLASS: B04 D16 S03
INVENTOR(S): DUNN, P; MURDIN, A D; OOMEN, R P; WANG, J
PATENT ASSIGNEE(S): (AVET) AVENTIS PASTEUR LTD
COUNTRY COUNT: 95
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2001075114	A2	20011011	(200174)*	EN	90
AU 2001048178	A	20011015	(200209)		

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001075114	A2	WO 2001-CA462	20010404
AU 2001048178	A	AU 2001-48178	20010404

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001048178	A Based on	WO 200175114

PRIORITY APPLN. INFO: US 2000-194477P 20000404
AN 2001-648559 [74] WPIDS
AB WO 200175114 A UPAB: 20011217
NOVELTY - A transmembrane polypeptide from **Chlamydia**, preferably **C. pneumoniae** comprising a 579 residue amino acid sequence, fully defined in the specification, an immunogenic fragment of at least 12 consecutive amino acids of S1, or a polypeptide modified without loss of immunogenicity and having at least 75 % identity to them, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a nucleic acid molecule (II) comprising a sequence encoding (I), a 1940 nucleotide sequence (S2), fully defined in the specification, a sequence encoding a polypeptide encoded by S2, a sequence comprising at least 38 consecutive nucleotides of them, or a sequence encoding a polypeptide having at least 75 % identity to a polypeptide encoded by S2;

(2) a nucleic acid molecule (IIa) comprising a sequence which is antisense to (II);

(3) a nucleic acid molecule (IIb) comprising a sequence encoding a fusion protein (FP) comprising a polypeptide encoded by (II) and a second polypeptide;

(4) a vaccine (IIIa) comprising a vaccine vector and at least one first nucleic acid encoding (I) or FP, which is capable of being expressed, and optionally the vaccine comprises a second nucleic acid encoding and capable of expressing an additional polypeptide which enhances the immune response to the polypeptide expressed by

the first nucleic acid;

(5) a vaccine (IIIb) comprising (II)-(IIb) and a vaccine vector, where (II)-(IIb) is expressed as a polypeptide, and optionally the vaccine comprises a second nucleic acid encoding an additional polypeptide which enhances the immune response to the polypeptide expressed by (II)-(IIb);

(6) a pharmaceutical composition (PC) comprising (II)-(IIb), (IIIa) or (IIIb);

(7) a unicellular host (IV) transformed with (II)-(IIb);

(8) an isolated nucleic acid probe of 5-100 nucleotides which hybridizes under stringent conditions to S2, or its complement or antisense sequence;

(9) an isolated primer of 10-40 nucleotides which hybridizes under stringent conditions to S2, or its complement or antisense sequence;

(10) a polypeptide (Ia) encoded by (II)-(IIb);

(11) a fusion protein (FP) comprising (I) or (Ia), and a second polypeptide;

(12) producing (I) and FP;

(13) an antibody (Ab) against (I) or FP;

(14) a vaccine (IIIc) comprising (I), a polypeptide encoded by (II), or FP comprising (I) and a second polypeptide, and optionally comprising an additional polypeptide which enhances the immune response to the first polypeptide;

(15) a vaccine (IIId) comprising at least one first polypeptide selected from (I) or FP, and optionally comprising an additional polypeptide which enhances the immune response to the first polypeptide;

(16) a pharmaceutical composition comprising (I), FP, (IIIc) or Ab;

(17) a diagnostic kit comprising instructions for use and a component selected from (I), (II), FP and Ab;

(18) identifying (I) or FP which induces an immune response effective to prevent or lessen the severity of **Chlamydia** infection in a mammal previously immunized with polypeptide, by immunizing a mouse with (I) or FP, and inoculating the immunized mouse with **Chlamydia**, where (I) or FP are identified;

(19) an expression plasmid **pCACPNM643** given in the specification;

(20) a nucleic acid molecule comprising a sequence (S7); and

(21) a peptide comprising a sequence (S8).

(S7) is ataagaatgcggccgccaccatgcagaagcatccttccttttatc or gcgccggatcccagagtcttgcagacgggg.

(S8) is AlaLysTyrArgLysLysGlnGluAlaSerValLysLysTyrGln or TyrLeuPhePheProGlyTyrTyrThr.

ACTIVITY - Antibacterial.

MECHANISM OF ACTION - Vaccine (claimed); gene therapy.

Groups of 7-9 week old male Balb/c mice (8-10 per group) were immunized intramuscularly (i.m.) and intranasally (i.n.) with plasmid DNA containing **Chlamydia** pneumoniae transmembrane protein gene. Saline or plasmid vector lacking an inserted Chlamydial gene was given to groups of control animals. At week 8, immunized mice were inoculated i.n. with 5 multiply 105 infection forming units (IFU) of **C. pneumoniae** strain AR39 to test their ability to limit the growth of a sublethal **C. pneumoniae** challenge. Lungs were taken from mice at day 9 post-challenge and immediately homogenized for analyzing the presence of Chlamydial inclusions using convalescent sera from

rabbits infected with **C. pneumoniae** and metal-enhanced DAB as a peroxidase substrate. The results showed that mice immunized with **pCACPNM643** had Chlamydial lung titers less than 60000 in 5/6 cases at day 9 (mean 37993), and values for control mice sham immunized with saline was 53100-315200 IFU/lung (mean 141593) at day 9.

USE - (I), (II), (III), PC and Ab are useful for preventing or treating **Chlamydia** infection. (I), (II) and Ab are useful for detecting **Chlamydia** infection, by assaying a body fluid of a mammal to be tested (claimed). (I) and (II) are useful as vaccines. The probes are used in diagnostic tests as capture or detection probes and in hybridization techniques, and primers are useful in amplification techniques for use in diagnostic methods. (I) is useful for detecting the presence of anti-**Chlamydia** antibodies in blood sample.

Dwg.0/4

L10 ANSWER 3 OF 5 WPIDS (C) 2002 THOMSON DERWENT
ACCESSION NUMBER: 2001-648557 [74] WPIDS
DOC. NO. NON-CPI: N2001-484573
DOC. NO. CPI: C2001-191444
TITLE: Novel **Chlamydia** glutamate binding protein and polynucleotide for preventing, detecting and treating **Chlamydia** infections in mammals, in particular humans.
DERWENT CLASS: B04 D16 S03
INVENTOR(S): DUNN, P; MURDIN, A D; OOMEN, R P; WANG, J
PATENT ASSIGNEE(S): (AVET) AVENTIS PASTEUR LTD
COUNTRY COUNT: 95
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2001075112	A2	20011011	(200174)*	EN	86

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2001048176 A 20011015 (200209)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001075112	A2	WO 2001-CA460	20010404
AU 2001048176	A	AU 2001-48176	20010404

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001048176	A Based on	WO 200175112

PRIORITY APPLN. INFO: US 2000-194472P 20000404
AN 2001-648557 [74] WPIDS

AB WO 200175112 A UPAB: 20011217
NOVELTY - An isolated glutamate binding protein (I) from **Chlamydia**, especially **C. pneumoniae** having a 250 residue amino acid sequence (S1), fully defined in the specification, its immunogenic fragment comprising at least 12 consecutive amino acids or a polypeptide which has been modified without loss of immunogenicity and which has 75 % sequence identity to (I), is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a nucleic acid molecule (II) comprising a nucleic acid sequence chosen from a sequence which encodes (I), a 953 base pair sequence (S2), fully defined in the specification, a sequence which encodes a polypeptide encoded by (S2), a sequence comprising 38 consecutive nucleotides from (II) and a sequence which encodes a polypeptide which is 75 % identical in amino acid sequence to the polypeptide encoded by (S2);

(2) a nucleic acid molecule (III) comprising a nucleic acid sequence which is anti-sense to (II);

(3) a fusion protein (IV) comprising (I) and a second polypeptide;

(4) a nucleic acid molecule (V) comprising a nucleic acid sequence which encodes (IV);

(5) a nucleic acid molecule chosen from (II), (III) and (V) operatively linked to one or more expression control sequences;

(6) a vaccine (VI), comprising:

(a) a vaccine vector and any one of the above nucleic acids, where each nucleic acid is capable of being expressed and the vaccine optionally comprises a second nucleic acid encoding and capable of expressing an additional polypeptide which enhances the immune response to the polypeptide expressed by the nucleic acid; or

(b) (I) or (IV), optionally comprising an additional polypeptide which enhances the immune response to (I) or (IV);

(7) a unicellular host (VII) transformed with (II), (III) or (V);

(8) an isolated nucleic acid probe of 5-100 nucleotides which hybridizes under stringent conditions to (II), its complement or anti-sense sequence;

(9) an isolated primer of 10-40 nucleotides which hybridizes under stringent conditions to (II), its complement or anti-sense sequence;

(10) a polypeptide encoded by (II) or (V);

(11) producing (I) or (IV), comprising culturing (VII);

(12) an antibody (VIII) against (I) or (IV);

(13) a pharmaceutical composition (IX) comprising (II), (III), (V), (I), (VI) or (VIII);

(14) a diagnostic kit comprising instructions for use and (II), (III), (V), (I), (IV) or (VIII);

(15) identifying (I) or (IV) which induces an immune response effective to prevent or lessen the severity of **Chlamydia** infection in a mammal previously immunized with polypeptide, by immunizing a mouse with (I) or (IV) and inoculating the immunized mouse with **Chlamydia**, where (I) or (IV) which prevents or lessens the severity of **Chlamydia** infection in the immunized mouse compared to a non-immunized control mouse is identified;

(16) expression plasmid **pCACPNM653** containing the glutamate binding protein gene;

(17) a nucleic acid molecule of sequence (S7); and
(18) a peptide having the sequence (S8).
(S7) is ATAAGAATGCGGCCGCCACCATGAAGATAAAATTTTCTTGGAAGG or GCGCCGGATCCCGGGAAGACGATACCGCTGTTTT. (S8) is GluAsnLeuAspAspLysLysThrGlnGly, LysThrArgArgSerGlyLysTyrAspAlaIleLys GlnArgTyrArgLeuPro, AlaLeuLeuAlaProValIleGluVal or PheLeuAsnAspLeuValSerGluIle.
ACTIVITY - Antibiotic.
MECHANISM OF ACTION - Vaccine.
The effect of **C. pneumoniae** glutamate binding protein gene in protecting mice against an intranasal challenge of **C. pneumoniae** was studied. Strain AR-39 Grayston et al (1990) Journal of Infectious Diseases 161:618-625 was used in Balb/c mice as a challenge infection model to examine the capacity of **Chlamydia** gene products delivered as naked DNA to elicit a protective response against a sublethal **C. pneumoniae** lung infection.
Protective immunity was defined as an accelerated clearance of pulmonary infection. Groups of 7-9 week old male Balb/c mice were immunized intramuscularly (i.m.) plus intranasally (i.n.) with plasmid DNA containing the **C. pneumoniae** glutamate binding protein gene (**pCACPNM653**). Saline or the plasmid vector lacking an inserted chlamydial gene was given to groups of control animals. For i.m. immunization, alternate left and right quadriceps were injected with 100 micro g of DNA in 50 micro l of phosphate buffered saline (PBS) on three occasions at 0, 3 and 6 weeks. For i.n. immunization, anesthetized mice were aspirated 50 micro l of PBS containing 50 micro g DNA on three occasions at 0, 3 and 6 weeks. At week 8, immunized mice were inoculated i.n. with 5 multiply 105 infection forming units (IFU) of **C. pneumoniae**, strain AR39 in 100 micro l of SPG buffer to test their ability to limit the growth of a sublethal **C. pneumoniae** challenge. Lungs were taken from mice at day 9 post-challenge and immediately homogenized. Dilutions of the homogenate were assayed for the presence of infectious **Chlamydia**. The results showed that the mice immunized i.n. and i.m. with **pCACPNM653** had chlamydial lung titers less than 60000 in 4 of 6 cases at day 9 and for control mice sham immunized with saline the value was 53100-315200 IFU/lung at day 9.
USE - (I)-(V) and (VIII) are useful for detecting **Chlamydia** infection by assaying a body fluid of a mammal with the components (claimed). (VI) and (IX) are useful for preventing or treating **Chlamydia** infection (claimed), in mammals, such as humans. The nucleic acid molecules are useful for producing (I), in the construction of vaccine vectors such as poxviruses, which are further useful for preventing and/or treating **Chlamydia** infection and in the construction of attenuated **Chlamydia** strains that can over-express the nucleic acid molecules or express it in a non-toxic, mutated form. (VI) is effective in preventing and/or treating **Chlamydia** infection for e.g. infection caused by C. trachomatis, C. psittaci, **C. pneumoniae** or C. pecorum. Probes which hybridize to (II) are useful in diagnostic tests, as capture of detection probes. (VIII) is useful in affinity chromatography for purifying (I) and in prophylactic or therapeutic passive immunization methods.
Dwg.0/4

L10 ANSWER 4 OF 5 WPIDS (C) 2002 THOMSON DERWENT
ACCESSION NUMBER: 2001-648549 [74] WPIDS
DOC. NO. CPI: C2001-191436
TITLE: Novel **Chlamydia** ATP-binding cassette and corresponding DNA molecule for preventing, diagnosing and treating **Chlamydia** infections in mammals, in particular humans.
DERWENT CLASS: B04 D16
INVENTOR(S): DUNN, P; MURDIN, A D; OOMEN, R P; WANG, J
PATENT ASSIGNEE(S): (AVET) AVENTIS PASTEUR LTD
COUNTRY COUNT: 95
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2001074863	A2	20011011	(200174)*	EN	88

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2001048171 A 20011015 (200209)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001074863	A2	WO 2001-CA455	20010404
AU 2001048171	A	AU 2001-48171	20010404

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2001048171	A	Based on	WO 200174863

PRIORITY APPLN. INFO: US 2000-194464P 20000404
AN 2001-648549 [74] WPIDS
AB WO 200174863 A UPAB: 20011217
NOVELTY - An isolated ATP-binding cassette polypeptide (I) from **Chlamydia**, especially **C. pneumoniae** having a 532 residue amino acid sequence (S1), fully defined in the specification, its immunogenic fragment comprising at least 12 consecutive amino acids or a polypeptide which has been modified without loss of immunogenicity and which has 75 % sequence identity to (I), is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a nucleic acid molecule (II) comprising a nucleic acid sequence chosen from a sequence which encodes (I), a 1799 base pair sequence, fully defined in the specification, a sequence which encodes a polypeptide encoded by (S2), a sequence comprising 38 consecutive nucleotides from (II) and a sequence which encodes a polypeptide which is 75 % identical in amino acid sequence to the polypeptide encoded by (S2);

(2) a nucleic acid molecule (III) comprising a nucleic acid

sequence which is anti-sense to (II);

(3) a fusion protein (IV) comprising (I) and a second polypeptide;

(4) a nucleic acid molecule (V) comprising a nucleic acid sequence which encodes (IV);

(5) a nucleic acid molecule chosen from (II), (III) and (V) operatively linked to one or more expression control sequences;

(6) a vaccine (VI), comprising:

(a) a vaccine vector and (II), (III) or (V), where each nucleic acid is capable of being expressed and the vaccine optionally comprises a second nucleic acid encoding and capable of expressing an additional polypeptide which enhances the immune response to the polypeptide expressed by the nucleic acid; or

(b) (I) or (IV), optionally comprising an additional polypeptide which enhances the immune response to (I) or (IV);

(7) a unicellular host (VII) transformed with any one of the above nucleic acids;

(8) an isolated nucleic acid probe of 5-100 nucleotides which hybridizes under stringent conditions to (II), its complement or anti-sense sequence;

(9) an isolated primer of 10-40 nucleotides which hybridizes under stringent conditions to (II), its complement or anti-sense sequence;

(10) a polypeptide encoded by (II) or (V);

(11) producing (I) or (IV);

(12) an antibody (VIII) against (I) or (IV);

(13) a pharmaceutical composition (IX) comprising (II), (III), (V), (I), (VI) or (VIII);

(14) a diagnostic kit comprising instructions for use and (II), (III), (V), (I), (IV) or (VIII);

(15) identifying (I) or (IV) which induces an immune response effective to prevent or lessen the severity of **Chlamydia** infection in a mammal previously immunized with polypeptide, by immunizing a mouse with (I) or (IV) and inoculating the immunized mouse with **Chlamydia**, where (I) or (IV) which prevents or lessens the severity of **Chlamydia** infection in the immunized mouse compared to a non-immunized control mouse is identified;

(16) expression plasmid **pCACPNM209** containing the ATP-binding cassette gene, as shown in the specification;

(17) a nucleic acid molecule of sequence ATAAGAATGCGGCCGCCACCATGCGCAAGATATCAGTGGGAATC or GCGCCGGATCCCATTTTCCTTAGCATAACGGAAGTCC; and

(18) a peptide having the sequence (Ia)

(Ia) is AsnIleHisSerTyrProGluHisGlnLysGlnGluMetAlaGlnArgGlnAlaTyrAlaLysLys, GlnAsnIleGluGlnGluGlnAspHisGlnLysArgSerGlu or ArgLeuLeuSerGluIleSerLeuVal.

ACTIVITY - Antibiotic.

MECHANISM OF ACTION - Vaccine.

The effect of **C. pneumoniae** ATP-binding cassette gene in protecting mice against an intranasal challenge of **C. pneumoniae** was studied. Strain AR-39 Grayston et al (1990) Journal of Infectious Diseases 161:618-625 was used in Balb/c mice as a challenge infection model to examine the capacity of **Chlamydia** gene products delivered as naked DNA to elicit a protective response against a sublethal **C. pneumoniae** lung infection. Protective immunity was defined as an accelerated clearance of pulmonary infection. Groups of 7-9

week old male Balb/c mice were immunized intramuscularly (i.m.) plus intranasally (i.n.) with plasmid DNA containing the **C. pneumoniae** ATP-binding cassette gene (**pCACPNM209**). Saline or the plasmid vector lacking an inserted chlamydial gene was given to groups of control animals. For i.m. immunization, alternate left and right quadriceps were injected with 100 micro g of DNA in 50 micro l of phosphate buffered saline (PBS) on three occasions at 0, 3 and 6 weeks. For i.n. immunization, anesthetized mice were aspirated 50 micro l of PBS containing 50 micro g DNA on three occasions at 0, 3 and 6 weeks. At week 8, immunized mice were inoculated i.n. with 5 multiply 105 infection forming units (IFU) of **C. pneumoniae**, strain AR39 in 100 micro l of SPG buffer to test their ability to limit the growth of a sublethal **C. pneumoniae** challenge. Lungs were taken from mice at day 9 post-challenge and immediately homogenized. Dilutions of the homogenate were assayed for the presence of infectious **Chlamydia**. The results showed that the mice immunized i.n. and i.m. with **pCACPNM209** had chlamydial lung titers less than 61000 in 4 of 6 cases at day 9 and for control mice sham immunized with saline the value was 61100-300500 IFU/lung at day 9.

USE - (I)-(V) and (VIII) are useful for detecting **Chlamydia** infection by assaying a body fluid of a mammal with the components. (VI) and (IX) are useful for preventing or treating **Chlamydia** infection (claimed), in mammals, such as humans. The nucleic acid molecules are useful for producing (I), in the construction of vaccine vectors such as poxviruses, which are further useful for preventing and/or treating **Chlamydia** infection and in the construction of attenuated **Chlamydia** strains that can over-express the nucleic acid molecules or express it in a non-toxic, mutated form. (VI) is effective in preventing and/or treating **Chlamydia** infection, e.g. infection caused by C. trachomatis, C. psittaci, **C. pneumoniae** or C. pecorum. Probes which hybridize to (II) are useful in diagnostic tests, as capture of detection probes. (VIII) is useful in affinity chromatography for purifying (I) and in prophylactic or therapeutic passive immunization methods.

Dwg.0/4

L10 ANSWER 5 OF 5 WPIDS (C) 2002 THOMSON DERWENT

ACCESSION NUMBER: 2000-687542 [67] WPIDS
DOC. NO. CPI: C2000-209327
TITLE: Nucleic acids encoding a 76 kDa protein from **Chlamydia** pneumoniae, useful for vaccinating against **Chlamydia** infections.
DERWENT CLASS: B04 D16
INVENTOR(S): DUNN, P; MURDIN, A D; OOMEN, R P; WANG, J
PATENT ASSIGNEE(S): (AVET) AVENTIS PASTEUR LTD
COUNTRY COUNT: 93
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2000066739	A2	20001109	(200067)*	EN	90

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT

RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2000043885 A 20001117 (200111)
EP 1177301 A2 20020206 (200218) EN
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000066739	A2	WO 2000-CA511	20000503
AU 2000043885	A	AU 2000-43885	20000503
EP 1177301	A2	EP 2000-925004	20000503
		WO 2000-CA511	20000503

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2000043885	A	Based on	WO 200066739
EP 1177301	A2	Based on	WO 200066739

PRIORITY APPLN. INFO: US 1999-141276P 19990630; US 1999-132270P 19990503
AN 2000-687542 [67] WPIDS
AB WO 200066739 A UPAB: 20001223
NOVELTY - Nucleic acids (NAM1) encoding a 76 kDa protein (PEP1) from **Chlamydia** pneumoniae, is new. NAM1 and PEP1 have defined nucleotide and amino acid sequences ((I)-(VIII)) given in the specification.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(1) a nucleic acid molecule (NAM1) comprising a nucleic acid sequence which encodes a polypeptide selected from:

(a) one of 3 defined amino acid sequences ((I)-(III)) given in the specification;

(b) a immunogenic fragment comprising at least 12 consecutive amino acids from (I)-(III); and

(c) the polypeptides of (a) and (b) which have been modified to improve their immunogenicity (the modified polypeptide is at least 75% identical in sequence to the corresponding polypeptides of (a) and (b);

(2) a nucleic acid molecule (I') comprising a sequence antisense to NAM1;

(3) a nucleic acid molecule (NAM2) which encodes a fusion protein that comprises a polypeptide encoded by NAM1 and an additional polypeptide;

(4) a vaccine (VAC1) comprising NAM1 and/or NAM2 and a vaccine vector (each nucleic acid molecule is expressed as a polypeptide and the vaccine may comprise additional nucleic acids encoding other polypeptides which enhance the immune response to the polypeptide expressed from NAM1 and/or NAM2);

(5) a unicellular host (UCH) transformed with NAM1 and NAM2 operatively linked to at least 1 expression control sequence;

(6) a nucleic acid probe of 5-100 nucleotides which hybridizes under stringent conditions to (I) (or homolog, complementary or antisense sequences of (I));

(7) a polypeptide (PEP1) encoded by NAM1 or NAM2;
(8) a fusion polypeptide (PEP2) comprising PEP1 and an additional polypeptide;
(9) a method for producing PEP1 comprising culturing UCH;
(10) an antibody (Ab) against PEP1 and/or PEP2;
(11) a vaccine (VAC2) comprising PEP1 and/or PEP2 (the vaccine may comprise additional polypeptides which enhance the immune response to PEP1 and/or PEP2);
(12) a diagnostic kit comprising NAM1, NAM2, PEP1, PEP2 and/or Ab and instructions for use;
(13) a method for identifying polypeptides (either PEP1 or PEP) which induce an immune response that prevents or reduces the severity of **Chlamydia** infections in mammals previously immunized with the polypeptide, comprising:
(a) immunizing a mouse with the polypeptide; and
(b) inoculating the immunized mouse with **Chlamydia** (the polypeptide which prevents or lessens the severity of the **Chlamydia** infection in the immunized mouse compared to a non-immunized control mouse is identified);
(14) an expression plasmid selected from **pCACPNM555a**, pCAI555, pCAD76kDa; and
(15) an isolated 76 kDa protein (PEP3) from **Chlamydia**

.

ACTIVITY - Bactericidal.
MECHANISM OF ACTION - Vaccine.
Mice immunized intranasally and intramuscularly with **pCACPNM555a** had Chlamydial lung titers less than 30000 IFU/lung in 5 of 6 cases at day 9 the range of values for control mice sham immunized with saline were 20800-323300 IFU/lung.
USE - NAM1, NAM2, PEP1, PEP2, VAC1, VAC2 and Ab may be used as antigens for preventing and treating **Chlamydia** infection by vaccination. NAM1, NAM2, PEP1, PEP2 and Ab may also be used to detect **Chlamydia** infection in mammals by using them to assay body fluid (claimed) (e.g. in DNA hybridization assays and immunoassays).
Dwg.0/9

(FILE 'MEDLINE' ENTERED AT 14:30:43 ON 15 MAY 2002)
L12 9994 SEA FILE=MEDLINE ABB=ON PLU=ON (B3.440.190.190.)/CT
L13 12322 SEA FILE=MEDLINE ABB=ON PLU=ON MYOSINS/CT
L14 1 SEA FILE=MEDLINE ABB=ON PLU=ON L12 AND L13

L14 ANSWER 1 OF 1 MEDLINE
AN 1999174464 MEDLINE
TI Chlamydia protein linked to heart disease.
AU Gura T
SO SCIENCE, (1999 Feb 26) 283 (5406) 1238-9.
Journal code: UJ7; 0404511. ISSN: 0036-8075.

(FILE 'USPATFULL' ENTERED AT 14:33:08 ON 15 MAY 2002)
L1 3614 SEA FILE=CAPLUS ABB=ON PLU=ON CHLAMYDIA OR CHLAMYDOPHIL ? OR C PNEUMON?
L15 33 SEA FILE=USPATFULL ABB=ON PLU=ON L1(L)MYOSIN
L16 0 SEA FILE=USPATFULL ABB=ON PLU=ON L15 AND PCACPNM?

L1 3614 SEA FILE=CAPLUS ABB=ON PLU=ON CHLAMYDIA OR CHLAMYDOPHIL ? OR C PNEUMON?

L15 33 SEA FILE=USPATFULL ABB=ON PLU=ON L1(L)MYOSIN
L17 32 SEA FILE=USPATFULL ABB=ON PLU=ON L15(L)(PEPTIDE OR POLYPEPTIDE OR PROTEIN OR POLYPROTEIN)
L18 30 SEA FILE=USPATFULL ABB=ON PLU=ON L17(L)(NUCLEIC OR DNA OR DEOXYRIBONUCLEIC OR DEOXY RIBONUCLEIC OR POLYNUCLEOTIDE OR NUCLEOTIDE)
L19 26 SEA FILE=USPATFULL ABB=ON PLU=ON L18(L)(VACCIN? OR IMMUNIZ? OR IMMUNIS?)
L20 22 SEA FILE=USPATFULL ABB=ON PLU=ON L19(L)PLASMID

L20 ANSWER 1 OF 22 USPATFULL
ACCESSION NUMBER: 2002:102261 USPATFULL
TITLE: Functional promoter for CCR5
INVENTOR(S): Guignard, Florence, Bethesda, MD, United States
Murphy, Philip M., Rockville, MD, United States
Combadiere, Christophe, Paris, FRANCE
Tiffany, H. Lee, Rockville, MD, United States
PATENT ASSIGNEE(S): The United States of America as represented by the Department of Health and Human Services, Washington, DC, United States (U.S. government)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6383746	B1	20020507
APPLICATION INFO.:	US 1998-177437		19981021 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-65934P	19971023 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: McGarry, Sean
ASSISTANT EXAMINER: Epps, Janet L.
LEGAL REPRESENTATIVE: Needle & Rosenberg, PC
NUMBER OF CLAIMS: 30
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 2190
AB A functional promoter for the chemokine receptor CCR5 is provided. The invention provides a nucleic acid sequence for the promoter and methods of reducing inflammation and susceptibility to HIV infection by suppressing the activity of the promoter.

INCL INCLM: 435/006.000
INCLS: 435/069.100; 435/320.100; 536/023.100; 536/024.100; 536/024.300; 536/024.310; 536/024.330; 536/024.500
NCL NCLM: 435/006.000
NCLS: 435/069.100; 435/320.100; 536/023.100; 536/024.100; 536/024.300; 536/024.310; 536/024.330; 536/024.500

L20 ANSWER 2 OF 22 USPATFULL
ACCESSION NUMBER: 2002:84902 USPATFULL
TITLE: Nucleic acids, proteins and antibodies
INVENTOR(S): Rosen, Craig A., Laytonsville, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES

	NUMBER	KIND	DATE

PATENT INFORMATION: US 2002044941 A1 20020418
APPLICATION INFO.: US 2001-925302 A1 20010810 (9)
RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 2000-US5918, filed on 8 Mar 2000, UNKNOWN

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-124270P	19990312 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
LINE COUNT: 21121
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel lung cancer related polynucleotides, the polypeptides encoded by these polynucleotides herein collectively referred to as "lung cancer antigens," and antibodies that immunospecifically bind these polypeptides, and the use of such lung cancer polynucleotides, antigens, and antibodies for detecting, treating, preventing and/or prognosing disorders of the lung, including, but not limited to, the presence of lung cancer and lung cancer metastases. More specifically, isolated lung cancer nucleic acid molecules are provided encoding novel lung cancer polypeptides. Novel lung cancer polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human lung cancer polynucleotides, polypeptides, and/or antibodies. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to the lung, including lung cancer, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The invention further relates to methods and/or compositions for inhibiting or promoting the production and/or function of the polypeptides of the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 424/184.100
INCLS: 435/069.100; 435/325.000; 435/320.100; 435/006.000; 435/007.100; 435/183.000; 514/044.000; 536/023.100
NCL NCLM: 424/184.100
NCLS: 435/069.100; 435/325.000; 435/320.100; 435/006.000; 435/007.100; 435/183.000; 514/044.000; 536/023.100

L20 ANSWER 3 OF 22 USPATFULL
ACCESSION NUMBER: 2002:72627 USPATFULL
TITLE: Nucleic, acids, proteins, and antibodies
INVENTOR(S): Rosen, Craig A., Laytonsville, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002039764	A1	20020404
APPLICATION INFO.:	US 2001-925298	A1	20010810 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 2000-US5881,

filed on 8 Mar 2000, UNKNOWN

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-124270P	19990312 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
LINE COUNT: 20087
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel ovarian cancer and/or breast cancer related polynucleotides, the polypeptides encoded by these polynucleotides herein collectively referred to as "ovarian and/or breast antigens," and antibodies that immunospecifically bind these polypeptides, and the use of such ovarian and/or breast polynucleotides, antigens, and antibodies for detecting, treating, preventing and/or prognosing disorders of the reproductive system, particularly disorders of the ovaries and/or breast, including, but not limited to, the presence of ovarian and/or breast cancer and ovarian and/or breast cancer metastases. More specifically, isolated ovarian and/or breast nucleic acid molecules are provided encoding novel ovarian and/or breast polypeptides. Novel ovarian and/or breast polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human ovarian and/or breast polynucleotides, polypeptides, and/or antibodies. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to the ovaries and/or breast, including ovarian and/or breast cancer, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The invention further relates to methods and/or compositions for inhibiting or promoting the production and/or function of the polypeptides of the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 435/069.100
INCLS: 435/325.000; 435/320.100; 536/023.100
NCL NCLM: 435/069.100
NCLS: 435/325.000; 435/320.100; 536/023.100

L20 ANSWER 4 OF 22 USPATFULL
ACCESSION NUMBER: 2002:66639 USPATFULL
TITLE: Compositions comprising heat shock proteins or alpha(2) macroglobulin, antigenic molecules and saponins, and methods of use thereof
INVENTOR(S): Armen, Garo H., Manhasset, NY, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002037290	A1	20020328
APPLICATION INFO.:	US 2001-909778	A1	20010720 (9)

Searcher : Shears 308-4994

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-223133P	20000807 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Pennie & Edmonds LLP, 1155 Avenue of the Americas, New York, NY, 10036-2711	
NUMBER OF CLAIMS:	119	
EXEMPLARY CLAIM:	1	
LINE COUNT:	4136	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to pharmaceutical compositions and methods for the prevention and treatment of autoimmune diseases, infectious diseases, neurodegenerative diseases, and primary and metastatic neoplastic diseases. In the practice of the invention, the compositions are employed comprising: (a) a heat shock protein (hsp) or an alpha(2)macroglobulin (.alpha.2M); (b) a saponin; and, optionally, (c) an antigenic molecule. The antigenic molecule displays the antigenicity of an antigen of: (a) a cell that elicits an autoimmune response; (b) an agent of an infectious disease; (c) a cancerous cell; or (d) a cell or structure associated with a neurodegenerative or amyloid disease. The hsps that can be used in the practice of the invention include but are not limited to hsp70, hsp90, gp96, calreticulin, hsp 110, grp 170, and PDI, alone or in combination with each other. The antigenic molecule can be covalently or noncovalently bound to the hsp or .alpha.2M, free in solution, and/or covalently bound to the saponin. The compositions of the invention can be administered alone or in combination with the administration of antigen presenting cells sensitized with an hsp- or .alpha.2M-antigenic molecule complex.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL	INCLM:	424/178.100
	INCLS:	514/012.000; 514/026.000
NCL	NCLM:	424/178.100
	NCLS:	514/012.000; 514/026.000

L20 ANSWER 5 OF 22 USPATFULL

ACCESSION NUMBER:	2002:50767 USPATFULL
TITLE:	Methods and compositions for directed cloning and subcloning using homologous recombination
INVENTOR(S):	Stewart, A. Francis, Leimen, GERMANY, FEDERAL REPUBLIC OF Zhang, Youming, Heidelberg, GERMANY, FEDERAL REPUBLIC OF Muyrers, Joep Pieter Paul, Meerssen, NETHERLANDS
PATENT ASSIGNEE(S):	The European Molecular Biology Laboratory, Heidelberg, GERMANY, FEDERAL REPUBLIC OF (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6355412	B1	20020312
APPLICATION INFO.:	US 1999-350830		19990709 (9)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Schwartzman, Robert A.		

Searcher : Shears 308-4994

ASSISTANT EXAMINER: Davis, Katharine F
LEGAL REPRESENTATIVE: Pennie & Edmonds LLP
NUMBER OF CLAIMS: 54
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Figure(s); 8 Drawing Page(s)
LINE COUNT: 3067
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is directed to methods and compositions for DNA subcloning using bacterial recombinase-mediated homologous recombination. The invention relates to methods for cloning, compositions comprising polynucleotides usefall as cloning vectors, cells comprising such polynucleotide compositions, and kits useful for cloning mediated by bacterial recombinases, such as RecE/T and Red.alpha./.beta..

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 435/004.000
INCLS: 435/006.000; 435/091.400; 435/320.100; 435/252.800; 435/252.100; 435/325.000; 536/023.100
NCL NCLM: 435/004.000
NCLS: 435/006.000; 435/091.400; 435/320.100; 435/252.800; 435/252.100; 435/325.000; 536/023.100

L20 ANSWER 6 OF 22 USPATFULL
ACCESSION NUMBER: 2002:48016 USPATFULL
TITLE: Complexes of alpha (2) macroglobulin and antigenic molecules for immunotherapy
INVENTOR(S): Srivastava, Pramod K., Avon, CT, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002028207	A1	20020307
APPLICATION INFO.:	US 2001-873403	A1	20010604 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2000-625139, filed on 25 Jul 2000, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-209266P	20000602 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: PENNIE AND EDMONDS, 1155 AVENUE OF THE AMERICAS, NEW YORK, NY, 100362711
NUMBER OF CLAIMS: 36
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 65 Drawing Page(s)
LINE COUNT: 4477
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to complexes of alpha (2) macroglobulin associated with antigenic molecules for use in immunotherapy. The invention relates to methods for using such compositions in the diagnosis and treatment of immune disorders, proliferative disorders, and infectious diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 424/185.100
INCLS: 424/190.100; 424/178.100; 530/391.100
NCL NCLM: 424/185.100

NCLS: 424/190.100; 424/178.100; 530/391.100

L20 ANSWER 7 OF 22 USPATFULL

ACCESSION NUMBER:	2002:9854 USPATFULL
TITLE:	Vectors and methods for immunization or therapeutic protocols
INVENTOR(S):	Krieg, Arthur M., Iowa City, IA, United States Davis, Heather L., Ottawa, CANADA Wu, Tong, Hull, CANADA Schorr, Joachim, Hilden, GERMANY, FEDERAL REPUBLIC OF
PATENT ASSIGNEE(S):	University of Iowa Research Foundation, Iowa City, IA, United States (U.S. corporation) Loeb Health Research Institute at the Ottawa Hospital, Ottawa, CANADA (non-U.S. corporation) Coley Pharmaceutical GmbH, Langenfeld, GERMANY, FEDERAL REPUBLIC OF (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6339068	B1	20020115
APPLICATION INFO.:	US 1998-82649		19980520 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-47209P	19970520 (60)
	US 1997-47233P	19970520 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	GRANTED
PRIMARY EXAMINER:	Nguyen, Dave T.
LEGAL REPRESENTATIVE:	Wolf, Greenfield & Sacks, P. C.
NUMBER OF CLAIMS:	109
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	15 Drawing Figure(s); 15 Drawing Page(s)
LINE COUNT:	4069

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention shows that DNA vaccine vectors can be improved by removal of CpG-N motifs and optional addition of CpG-S motifs. In addition, for high and long-lasting levels of expression, the optimized vector should include a promoter/enhancer that is not down-regulated by the cytokines induced by the immunostimulatory CpG motifs. Vectors and methods of use for immunostimulation are provided herein. The invention also provides improved gene therapy vectors by determining the CpG-N and CpG-S motifs present in the construct, removing stimulatory CpG (CpG-S) motifs and/or inserting neutralizing CpG (CpG-N) motifs, thereby producing a nucleic acid construct providing enhanced expression of the therapeutic polypeptide. Methods of use for such vectors are also included herein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 514/044.000
INCLS: 424/093.200; 435/091.400; 435/091.410; 435/091.420; 435/320.100; 435/455.000

NCL NCLM: 514/044.000
NCLS: 424/093.200; 435/091.400; 435/091.410; 435/091.420; 435/320.100; 435/455.000

L20 ANSWER 8 OF 22 USPATFULL
ACCESSION NUMBER: 2001:191262 USPATFULL
TITLE: DNA construct for immunization or gene therapy
INVENTOR(S): Ricigliano, Joseph W., 1880 Laurelhurst Dr., Salt Lake City, UT, United States 84108
Araneo, Barbara A., 2434 Kentucky Ave., Salt Lake City, UT, United States 84117

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6310196	B1	20011030
APPLICATION INFO.:	US 1998-119264		19980720 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1995-530529, filed on 19 Sep 1995, now patented, Pat. No. US 5795872
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Yucel, Remy
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 7 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT: 660
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is directed to a DNA construct which is useful for immunization or gene therapy. The construct of the invention comprises muscle specific regulatory elements, such as a promoter or a promoter and one or more enhancer elements, and a DNA sequence under control of the muscle specific regulatory elements. Several DNA sequences may be incorporated into the DNA construct. In one embodiment, the DNA sequence codes for an antigen, antigenic determinant or an epitope of an antigen. In a second embodiment, the DNA sequence is a normal muscle gene which is effected in a muscle disease. In a third embodiment, the DNA sequence is an antisense for blocking an abnormal muscle gene. In a fourth embodiment, the DNA sequence codes for a protein which circulates in the mammalian blood or lymphatic systems. The present invention is useful for ameliorating the effects of diseases of muscle by expression of the normal gene or blocking abnormal gene expression within muscle cells, for the heterologous expression of a transgene which codes for a circulating protein or a protein which modifies a disease state in which muscle is not primarily involved and for vaccine development.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 536/024.100
NCL NCLM: 536/024.100

L20 ANSWER 9 OF 22 USPATFULL
ACCESSION NUMBER: 2001:188410 USPATFULL
TITLE: Complexes of peptide-binding fragments of heat shock proteins and their use as immunotherapeutic agents
INVENTOR(S): Srivastava, Pramod K., Avon, CT, United States

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2001034042	A1	20011025
APPLICATION INFO.:	US 2001-759010	A1	20010112 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2000-488393,

filed on 20 Jan 2000, PENDING
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: PENNIE AND EDMONDS, 1155 AVENUE OF THE AMERICAS, NEW YORK, NY, 100362711
NUMBER OF CLAIMS: 46
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Page(s)
LINE COUNT: 3685
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to pharmaceutical compositions comprising peptide-binding fragments of heat shock proteins (HSPs) and noncovalent complexes of peptide-binding fragments of HSPs in noncovalent association with antigenic molecules. The invention further relates to methods for the use of such pharmaceutical compositions as immunotherapeutic agents for the treatment and prevention of infectious diseases and cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 435/068.100
INCLS: 514/012.000
NCL NCLM: 435/068.100
NCLS: 514/012.000

L20 ANSWER 10 OF 22 USPATFULL
ACCESSION NUMBER: 2001:152764 USPATFULL
TITLE: Vaccines against circovirus infections
INVENTOR(S): Poet, Steven E., Winterville, GA, United States
Ritchie, Branson W., Athens, GA, United States
Niagro, Frank D., Lawrenceville, GA, United States
Lukert, Phil D., Colbert, GA, United States
PATENT ASSIGNEE(S): University of Georgia Research Foundation, Inc., Athens, GA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6287856	B1	20010911
APPLICATION INFO.:	US 1999-267177		19990312 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-77890P	19980313 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Clark, Deborah J. R.
ASSISTANT EXAMINER: Sorbello, Eleanor
LEGAL REPRESENTATIVE: Needle & Rosenberg, P.C.
NUMBER OF CLAIMS: 22
EXEMPLARY CLAIM: 1
LINE COUNT: 846
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Vaccine compositions which are protective against circovirus infections, including porcine circovirus and psittacine beak and feather disease virus, in animals, comprising a nucleic acid vector comprising a eukaryotic cis-acting transcription/translation regulatory sequence functionally linked to a nucleic acid encoding an animal circovirus polypeptide,

wherein the nucleic acid lacks a viral origin of replication are disclosed. Nucleic acid vectors for the transient expression of one or more circovirus polypeptides in a eukaryotic cell comprising a nucleic acid vector comprising a eukaryotic cis-acting transcription/translation regulatory sequence functionally linked to the nucleic acids of the invention are described. Methods of preventing a circovirus-associated disease in an animal comprising administering to the animal a nucleic acid vector comprising a eukaryotic cis-acting transcription/translation regulatory sequence functionally linked to a nucleic acid encoding an animal circovirus polypeptide, wherein the nucleic acid lacks a viral origin of replication are also described. Methods of preventing a circovirus-associated disease in an animal comprising administering to the animal an immunogenic amount of one or more animal circovirus polypeptides are also described. Also disclosed are nucleic acid and polypeptide sequences useful in the vaccine compositions and methods of the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 435/320.100
INCLS: 424/093.100; 424/093.210; 424/186.100; 514/044.000; 530/350.000; 536/023.100; 536/023.500
NCL NCLM: 435/320.100
NCLS: 424/093.100; 424/093.210; 424/186.100; 514/044.000; 530/350.000; 536/023.100; 536/023.500

L20 ANSWER 11 OF 22 USPATFULL
ACCESSION NUMBER: 2001:136775 USPATFULL
TITLE: Compositions and methods for diagnosing and treating conditions, disorders, or diseases involving cell death
INVENTOR(S): Lo, Donald C., Chapel Hill, NC, United States
Barney, Shawn, Apex, NC, United States
Thomas, Mary Beth, Chapel Hill, NC, United States
Portbury, Stuart D., Durham, NC, United States
Puranam, Kasturi, Durham, NC, United States
Katz, Lawrence C., Durham, NC, United States
PATENT ASSIGNEE(S): Cogent Neuroscience, Inc., Durham, NC, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6277974	B1	20010821	
APPLICATION INFO.:	US 1999-461697		19991214	(9)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Low, Christopher S. F.
ASSISTANT EXAMINER: Robinson, Patricia
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 262 Drawing Figure(s); 92 Drawing Page(s)
LINE COUNT: 4670
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to compositions and methods for the treatment and diagnosis of conditions, disorders, or diseases involving cell death. The invention encompasses protective nucleic acids which, when introduced into a cell predisposed to undergo

cell death or in the process of undergoing cell death, prevent, delay, or rescue the cell from death relative to a corresponding cell into which no exogenous nucleic acids have been introduced. The invention encompasses nucleic acids of the protective sequence, host cell expression systems of the protective sequence, and hosts that have been transformed by these expression systems, including transgenic animals. The invention also encompasses novel protective sequence products, including proteins, polypeptides and peptides containing amino acid sequences of the proteins, fusion proteins of proteins, polypeptides and peptides, and antibodies directed against such gene products. The invention further relates to target sequences, including upstream and downstream regulatory sequences or complete gene sequences, antibodies, antisense molecules or sequences, ribozyme molecules, and other inhibitors or modulators directed against such protective sequences, protective sequence products, genes, gene products, and/or their regulatory elements involved in cell death. The present invention also relates to methods and compositions for the diagnosis and treatment of conditions, disorders, or diseases, involving cell death, including, but not limited to, treatment of the types of conditions, disorders, or diseases, which can be prevented, delayed or rescued from cell death and include, but are not limited to, those associated with the central nervous system, including neurological and psychiatric conditions, disorders, or diseases, and those of the peripheral nervous system. Further, the invention relates to methods of using the protective sequence, protective sequence products, and/or their regulatory elements for the identification of compounds that modulate the expression of the protective sequence and/or the activity of the protective sequence product. Such compounds can be useful as therapeutic agents in the treatment of various conditions, disorders, or diseases involving cell death.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 536/023.100
INCLS: 536/023.100; 536/023.500; 424/093.200; 424/093.100; 424/093.210; 435/069.100; 435/325.000; 435/352.000; 435/320.100; 530/300.000; 530/350.000
NCL NCLM: 536/023.100
NCLS: 424/093.100; 424/093.200; 424/093.210; 435/069.100; 435/320.100; 435/325.000; 435/352.000; 530/300.000; 530/350.000; 536/023.500

L20 ANSWER 12 OF 22 USPATFULL

ACCESSION NUMBER:	2001:67794 USPATFULL
TITLE:	Human respiratory syncytial virus peptides with antifusogenic and antiviral activities
INVENTOR(S):	Barney, Shawn O'Lin, Cary, NC, United States Lambert, Dennis Michael, Cary, NC, United States Petteway, Stephen Robert, Cary, NC, United States
PATENT ASSIGNEE(S):	Trimeris, Inc., Durham, NC, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6228983	B1	20010508
APPLICATION INFO.:	US 1995-485264		19950607 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1995-470896, filed on 6		

Jun 1995 Continuation-in-part of Ser. No. US 1994-360107, filed on 20 Dec 1994 Continuation-in-part of Ser. No. US 1994-255208, filed on 7 Jun 1994 Continuation-in-part of Ser. No. US 1993-73028, filed on 7 Jun 1993, now patented, Pat. No. US 5464933
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Scheiner, Laurie
ASSISTANT EXAMINER: Parkin, Jeffrey S.
LEGAL REPRESENTATIVE: Pennie & Edmonds LLP
NUMBER OF CLAIMS: 62
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 84 Drawing Figure(s); 83 Drawing Page(s)
LINE COUNT: 32166
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to peptides which exhibit antifusogenic and antiviral activities. The peptides of the invention consist of a 16 to 39 amino acid region of a human respiratory syncytial virus protein. These regions were identified through computer algorithms capable of recognizing the ALLMOTI5, 107x178x4, or PLZIP amino acid motifs. These motifs are associated with the antifusogenic and antiviral activities of the claimed peptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 530/300.000
INCLS: 530/324.000; 530/325.000; 530/326.000; 424/211.100; 424/186.100
NCL NCLM: 530/300.000
NCLS: 424/186.100; 424/211.100; 530/324.000; 530/325.000; 530/326.000

L20 ANSWER 13 OF 22 USPATFULL
ACCESSION NUMBER: 2001:1631 USPATFULL
TITLE: Methods for making modified recombinant vesiculoviruses
INVENTOR(S): Rose, John K., Guilford, CT, United States
PATENT ASSIGNEE(S): Yale University, New Haven, CT, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6168943	B1	20010102
APPLICATION INFO.:	US 1996-646695		19960503 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1995-435032, filed on 4 May 1995
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Bui, Phuong T.
LEGAL REPRESENTATIVE: Pennie & Edmonds LLP
NUMBER OF CLAIMS: 13
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 55 Drawing Figure(s); 55 Drawing Page(s)
LINE COUNT: 2933
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides recombinant replicable vesiculoviruses. The invention provides a method which, for the first time,

successfully allows the production and recovery of replicable vesiculoviruses, as well as recombinant replicable vesiculoviruses, from cloned DNA, by a method comprising expression of the full-length positive-strand vesiculovirus antigenomic RNA in host cells. The recombinant vesiculoviruses do not cause serious pathology in humans, can be obtained in high titers, and have use as vaccines. The recombinant vesiculoviruses can also be inactivated for use as killed vaccines.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 435/239.000
INCLS: 424/199.100; 424/224.100; 424/093.210; 435/235.100; 435/325.000; 435/320.100; 514/044.000; 536/023.720
NCL NCLM: 435/239.000
NCLS: 424/093.210; 424/199.100; 424/224.100; 435/235.100; 435/320.100; 435/325.000; 514/044.000; 536/023.720

L20 ANSWER 14 OF 22 USPATFULL
ACCESSION NUMBER: 2000:28125 USPATFULL
TITLE: Nucleic acids encoding myocardial peptides
INVENTOR(S): Bachmaier, Kurt, Toronto, Canada
Hessel, Andrew John, Toronto, Canada
Neu, Nickolaus, Innsbruck, Austria
Penninger, Josef Martin, Toronto, Canada
PATENT ASSIGNEE(S): Amgen Canada Inc., Mississauga, Canada (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6034230		20000307
APPLICATION INFO.:	US 1999-303862		19990503 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1998-133774, filed on 12 Aug 1998
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Chan, Christina Y.
ASSISTANT EXAMINER: De Cloux, Amy
LEGAL REPRESENTATIVE: Oleski, Nancy A., Odre, Steven M.
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1,2,3
LINE COUNT: 1405
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed are novel peptides that modulate inflammatory heart disease. Also disclosed are DNA molecules encoding the peptides, and methods of making the peptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 536/023.500
INCLS: 435/320.100; 435/252.300; 435/348.000
NCL NCLM: 536/023.500
NCLS: 435/252.300; 435/320.100; 435/348.000

L20 ANSWER 15 OF 22 USPATFULL
ACCESSION NUMBER: 2000:24473 USPATFULL
TITLE: Immunoassays for detecting chlamydial antigens or antibodies thereto using recombinant or synthetic major outer membrane protein polypeptides as substitute antigens

INVENTOR(S): Agabian, Nina, San Francisco, CA, United States
Stephens, Richard, Oakland, CA, United States
Kuo, Cho-Chou, Seattle, WA, United States
Mullenbach, Guy, Oakland, CA, United States
PATENT ASSIGNEE(S): Washington Research Foundation, Seattle, WA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6030799		20000229
APPLICATION INFO.:	US 1995-466152		19950606 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1993-144095, filed on 28 Oct 1993, now abandoned which is a continuation of Ser. No. US 1991-691639, filed on 25 Apr 1991, now abandoned which is a continuation of Ser. No. US 1986-818523, filed on 13 Jan 1986, now abandoned which is a continuation-in-part of Ser. No. US 1985-692001, filed on 14 Jan 1985, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Minnifield, Nita
ASSISTANT EXAMINER: Baskar, Padma
LEGAL REPRESENTATIVE: Townsend and Townsend and Crew
NUMBER OF CLAIMS: 21
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 8 Drawing Page(s)
LINE COUNT: 823
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods and compositions are provided for the production of a polypeptide which is immunologically cross-reactive with a naturally-occurring major outer membrane protein (MOMP) of Chlamydia trachomatis. A DNA construct including a replication system recognized by E. coli, and an MOMP gene under the transcriptional control of a .beta.-glactosidase promoter and terminator is provided. Recombinant phage .lambda.gtl1/L2/33 was deposited at the American Type Culture Collection, 12301 Parklawn Drive, Rockville, Md. 20852, on Jan. 10, 1985 and granted accession no. 40157. L2 B9-F DNA was deposited at the American Type Culture Collection on Dec. 31, 1985, and granted accession No. 40217.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 435/007.360
INCLS: 435/007.360; 435/069.700; 435/698.000; 435/172.300; 530/300.000; 530/350.000
NCL NCLM: 435/007.360
NCLS: 435/069.700; 435/069.800; 530/300.000; 530/350.000

L20 ANSWER 16 OF 22 USPATFULL
ACCESSION NUMBER: 1999:121537 USPATFULL
TITLE: Peptides capable of modulating inflammatory heart disease
INVENTOR(S): Bachmaier, Kurt, Toronto, Canada
Hessel, Andrew John, Toronto, Canada
Neu, Nickolaus, Innsbruck, Austria
Penninger, Josef Martin, Toronto, Canada
PATENT ASSIGNEE(S): Amgen Canada Inc., Mississauga, Canada (non-U.S.

corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5962636		19991005
APPLICATION INFO.:	US 1998-133774		19980812 (9)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Eisenschenk, Frank C.
ASSISTANT EXAMINER: Pelley, Ronald P
LEGAL REPRESENTATIVE: Oleski, Nancy A., Levy, Ron K., Odre, Steven M.
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1
LINE COUNT: 1397
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed are novel peptides that modulate inflammatory heart disease. Also disclosed are DNA molecules encoding the peptides, and methods of making the peptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 530/326.000
INCLS: 530/327.000; 424/190.100; 424/185.100
NCL NCLM: 530/326.000
NCLS: 424/185.100; 424/190.100; 530/327.000

L20 ANSWER 17 OF 22 USPATFULL
ACCESSION NUMBER: 1998:124386 USPATFULL
TITLE: Chlamydia major outer membrane protein
INVENTOR(S): Agabian, Nina, San Francisco, CA, United States
Stephens, Richard, Oakland, CA, United States
Kuo, Cho-Chou, Seattle, WA, United States
Mullenbach, Guy, Oakland, CA, United States
PATENT ASSIGNEE(S): Washington Research Foundation, Seattle, WA, United States (U.S. corporation)
Chiron Corporation, Emeryville, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5821055		19981013
APPLICATION INFO.:	US 1995-468451		19950606 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1993-144095, filed on 28 Oct 1993, now abandoned which is a continuation of Ser. No. US 1991-691639, filed on 25 Apr 1991, now abandoned which is a continuation of Ser. No. US 1986-818523, filed on 13 Jan 1986, now abandoned which is a continuation-in-part of Ser. No. US 1985-692001, filed on 14 Jan 1985, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Zitomer, Stephanie W.
ASSISTANT EXAMINER: Rees, Dianne
LEGAL REPRESENTATIVE: Townsend and Townsend and Crew LLP
NUMBER OF CLAIMS: 13
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Figure(s); 8 Drawing Page(s)
LINE COUNT: 721

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods and compositions are provided for the production of a polypeptide which is immunologically cross-reactive with a naturally-occurring major outer membrane protein (MOMP) of Chlamydia trachomatis. A DNA construct including a replication system recognized by E. coli, and an MOMP gene under the transcriptional control of a .beta.-galactosidase promoter and terminator is provided.

Recombinant phage .lambda.gt11/L2/33 was deposited at the American Type Culture Collection, 12301 Parklawn Drive, Rockville, Md. 20852, on Jan. 10, 1985 and granted accession no. 40157. L2 B9-F DNA was deposited at the American Type Culture Collection on Dec. 31, 1985, and granted accession No. 40217.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 435/006.000
INCLS: 536/023.100; 536/024.300; 536/024.320; 530/350.000; 435/091.200

NCL NCLM: 435/006.000
NCLS: 435/091.200; 530/350.000; 536/023.100; 536/024.300; 536/024.320

L20 ANSWER 18 OF 22 USPATFULL

ACCESSION NUMBER: 1998:98896 USPATFULL
TITLE: DNA construct for immunization
INVENTOR(S): Ricigliano, Joseph W., Salt Lake City, UT, United States
Araneo, Barbara A., Salt Lake City, UT, United States
PATENT ASSIGNEE(S): Pharmadigm, Inc., Salt Lake City, UT, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5795872		19980818	
APPLICATION INFO.:	US 1995-530529		19950919	(8)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Railey, Johnny
LEGAL REPRESENTATIVE: Rothwell, Figg, Ernst & Kurz, P.C.
NUMBER OF CLAIMS: 16
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 7 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT: 787

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is directed to a DNA construct which is useful for immunization or gene therapy. The construct of the invention comprises muscle specific regulatory elements, such as a promoter or a promoter and one or more enhancer elements, and a DNA sequence under control of the muscle specific regulatory elements. Several DNA sequences may be incorporated into the DNA construct. In one embodiment, the DNA sequence codes for an antigen, antigenic determinant or an epitope of an antigen. In a second embodiment, the DNA sequence is a normal muscle gene which is effected in a muscle disease. In a third embodiment, the DNA sequence is an antisense for blocking an abnormal muscle gene. In a fourth embodiment, the DNA sequence codes for a protein which

circulates in the mammalian blood or lymphatic systems. The present invention is useful for ameliorating the effects of diseases of muscle by expression of the normal gene or blocking abnormal gene expression within muscle cells, for the heterologous expression of a transgene which codes for a circulating protein or a protein which modifies a disease state in which muscle is not primarily involved and for vaccine development.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 514/044.000
INCLS: 435/320.100; 536/023.100; 536/023.700; 536/023.720; 536/024.100
NCL NCLM: 514/044.000
NCLS: 435/320.100; 536/023.100; 536/023.700; 536/023.720; 536/024.100

L20 ANSWER 19 OF 22 USPATFULL
ACCESSION NUMBER: 1998:72737 USPATFULL
TITLE: Chlamydia major outer membrane protein
INVENTOR(S): Agabian, Nina, San Francisco, CA, United States
Stephens, Richard, Oakland, CA, United States
Kuo, Cho-Chou, Seattle, WA, United States
Mullenbach, Guy, Oakland, CA, United States
PATENT ASSIGNEE(S): Washington Research Foundation, Seattle, WA, United States (U.S. corporation)
Chiron Corporation, Emeryville, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5770714		19980623
APPLICATION INFO.:	US 1995-466814		19950606 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1993-144095, filed on 28 Oct 1993, now abandoned which is a continuation of Ser. No. US 1991-691639, filed on 25 Apr 1991, now abandoned which is a continuation of Ser. No. US 1986-818523, filed on 13 Jan 1986, now abandoned which is a continuation-in-part of Ser. No. US 1985-692001, filed on 14 Jan 1985, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Jones, W. Gary
ASSISTANT EXAMINER: Rees, Dianne
LEGAL REPRESENTATIVE: Townsend and Townsend and Crew LLP
NUMBER OF CLAIMS: 13
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Figure(s); 8 Drawing Page(s)
LINE COUNT: 696
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods and compositions are provided for the production of a polypeptide which is immunologically cross-reactive with a naturally-occurring major outer membrane protein (MOMP) of Chlamydia trachomatis. A DNA construct including a replication system recognized by E. coli, and an MOMP gene under the transcriptional control of a .beta.-galactosidase promoter and terminator is provided. Recombinant phage .lambda.gt11/L2/33 was deposited at the American Type Culture Collection, 12301 Parklawn

Drive, Rockville, Md. 20852, on Jan. 10, 1985 and granted accession no. 40157. L2 B9-F DNA was deposited at the American Type Culture Collection on Dec. 31, 1985, and granted accession No. 40217.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 536/023.100
INCLS: 536/024.300; 536/024.320; 536/024.330; 435/006.000; 435/091.200; 435/320.100; 435/240.200; 435/254.110; 435/254.200; 435/172.300; 435/069.100; 530/300.000; 530/350.000
NCL NCLM: 536/023.100
NCLS: 435/006.000; 435/069.100; 435/091.200; 435/254.110; 435/254.200; 435/320.100; 530/300.000; 530/350.000; 536/024.300; 536/024.320; 536/024.330

L20 ANSWER 20 OF 22 USPATFULL
ACCESSION NUMBER: 97:78182 USPATFULL
TITLE: Invasive microorganisms
INVENTOR(S): Falkow, Stanley, Portola Valley, CA, United States
Isberg, Ralph, Brookline, MA, United States
Miller, Virginia, Van Nuys, CA, United States
St. Geme, III, Joseph W., Redwood City, CA, United States
Lee, Catherine A., Newton, MA, United States
PATENT ASSIGNEE(S): The Board of Trustees of the Leland Stanford Jr. University, Palo Alto, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5662908		19970902
APPLICATION INFO.:	US 1994-216086		19940321 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1992-844470, filed on 2 Mar 1992, now abandoned which is a continuation-in-part of Ser. No. US 1991-644826, filed on 23 Jan 1991, now patented, Pat. No. US 5239066 which is a continuation-in-part of Ser. No. US 1990-559904, filed on 30 Jul 1990, now abandoned which is a continuation-in-part of Ser. No. US 1989-340375, filed on 19 Apr 1989, now patented, Pat. No. US 5310654 which is a continuation-in-part of Ser. No. US 1985-761222, filed on 31 Jul 1985, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Mosher, Mary E.
LEGAL REPRESENTATIVE: Flehr, Hohbach, Test, Albritton & Herbert, Trecartin, Richard F., Silva, Robin M.
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 2673
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Novel methods and microorganisms are provided, where novel genetic mammalian cell invasive capability is imparted to a microorganism by the introduction of an exogenous ail or hil gene. The resulting

organisms are then capable of binding to mammalian cells and are transferred to the cytoplasm. Other novel genetic capabilities may be imparted to the unicellular microorganism, which may serve as a vaccine for one or more pathogens or may introduce genetic capabilities or foreign molecules into a mammalian host cell. The sequences may be used for an in vitro screen for pathogenicity. Mutant microorganisms having an attenuated invasive phenotype are also disclosed wherein one or more invasive genes have been modified.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 424/200.100
INCLS: 435/252.800; 435/252.300; 424/235.100; 424/258.100
NCL NCLM: 424/200.100
NCLS: 424/235.100; 424/258.100; 435/252.300; 435/252.800

L20 ANSWER 21 OF 22 USPATFULL
ACCESSION NUMBER: 93:69992 USPATFULL
TITLE: Yersinia ail nucleic acids
INVENTOR(S): St. Geme, III: Joseph W., Redwood City, CA, United States
Falkow, Stanley, Portola Valley, CA, United States
Isberg, Ralph, Brookline, MA, United States
Miller, Virginia, Van Nuys, CA, United States
PATENT ASSIGNEE(S): The Board of Trustees of Leland Stanford Jr. University, Stanford, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5239066		19930824
APPLICATION INFO.:	US 1991-644826		19910123 (7)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1990-559904, filed on 30 Jul 1990, now abandoned which is a continuation-in-part of Ser. No. US 1989-340375, filed on 19 Apr 1989 which is a continuation-in-part of Ser. No. US 1985-761222, filed on 31 Jul 1985, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Schwartz, Richard A.
ASSISTANT EXAMINER: Mosher, Mary E.
LEGAL REPRESENTATIVE: Flehr, Hohbach, Test, Albritton & Herbert
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
LINE COUNT: 2096
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Nucleic acids encoding all or part of a Yersinia ail gene are provided. The nucleic acid comprises at least 50 base pairs of a Yersinia ail gene in isolated form or consists or a fragment consisting essentially of at least 50 base pairs but not more than 50 kilo base pairs of a Yersinia ail gene. Such nucleic acids can also be operably linked to transcriptional and translational initiation and termination sequences which are functional in a microorganism host.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 536/023.700
INCLS: 536/024.320; 435/006.000; 435/069.100; 435/252.300; 435/320.100; 435/252.330; 935/011.000; 935/079.000
NCL NCLM: 536/023.700
NCLS: 435/006.000; 435/069.100; 435/252.300; 435/252.330; 435/320.100; 536/024.320

(FILE 'CAPLUS, MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO, USPATFULL' ENTERED AT 14:36:16 ON 15 MAY 2002)

L21	260	S	MURDIN A?/AU
L22	239	S	OOMEN R?/AU
L23	77646	S	WANG J?/AU
L24	3530	S	DUNN P?/AU
L25	53	S	L21 AND L22 AND L23 AND L24
L26	88	S	L21 AND (L22 OR L23 OR L24)
L27	78	S	L22 AND (L23 OR L24)
L28	62	S	L23 AND L24
L29	88	S	(L25 OR L26 OR L27 OR L28) AND L1
L30	44	DUP REM	L29 (44 DUPLICATES REMOVED)

L30 ANSWER 1 OF 44 USPATFULL

ACCESSION NUMBER: 2002:66642 USPATFULL

TITLE: **Chlamydia** antigens and corresponding DNA fragments and uses thereof

INVENTOR(S): **Murdin, Andrew D.**, Richmond Hill, CANADA
Oomen, Raymond P., Aurora, CANADA
Wang, Joe, Toronto, CANADA

PATENT ASSIGNEE(S): Aventis Pasteur Limited (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002037293	A1	20020328
APPLICATION INFO.:	US 2001-886468	A1	20010622 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-113280P	19981223 (60)
	US 1998-113281P	19981223 (60)
	US 1998-113282P	19981223 (60)
	US 1998-113283P	19981223 (60)
	US 1998-113284P	19981223 (60)
	US 1998-113285P	19981223 (60)
	US 1998-113385P	19981223 (60)
	US 1998-114050P	19981228 (60)
	US 1998-114056P	19981228 (60)
	US 1998-114057P	19981228 (60)
	US 1998-114058P	19981228 (60)
	US 1998-114059P	19981228 (60)
	US 1998-114061P	19981228 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BERNHARD D. SAXE, FOLEY & LARDNER, Suite 500, 3000 K Street N.W., Washington, DC, 20007-5109
NUMBER OF CLAIMS: 30
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 96 Drawing Page(s)
LINE COUNT: 1663

Searcher : Shears 308-4994

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides purified and isolated polynucleotide molecules that encode **Chlamydia** polypeptides which can be used in methods to prevent, treat, and diagnose **Chlamydia** infection. In one form of the invention, the polynucleotide molecules are selected from DNA that encode polypeptides CPN100686 RY-54 (SEQ ID Nos: 1 and 14), CPN100696 RY-55 (SEQ ID Nos: 2 and 15), CPN100709 RY-57 (SEQ ID Nos: 3 and 16), CPN100710 RY-58 (SEQ ID Nos: 4 and 17), CPN100711 RY-59 (SEQ ID Nos: 5 and 18), CPN100877 RY-61 (SEQ ID Nos: 6 and 19), CPN100325 RY-62 (SEQ ID Nos: 7 and 20), CPN100368 RY-63 (SEQ ID Nos: 8 and 21), CPN100624 RY-64 (SEQ ID Nos: 9 and 22), CPN100633 RY-65 (SEQ ID Nos: 10 and 23), CPN100985 RY-66 (SEQ ID Nos: 11 and 24), CPN100987 RY-67 (SEQ ID Nos: 12 and 25), CPN100988 RY-68 (SEQ ID Nos: 13 and 26).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L30 ANSWER 2 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 1

ACCESSION NUMBER: 2001:833541 CAPLUS
DOCUMENT NUMBER: 135:367765
TITLE: **Chlamydia** antigens and corresponding DNA fragments and their uses for DNA or immunogen vaccination against **Chlamydia** infection
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela**
PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.
SOURCE: PCT Int. Appl., 355 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001085972	A2	20011115	WO 2001-CA653	20010508

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

US 2000-202672P	P	20000508
US 2000-207852P	P	20000530
US 2000-211796P	P	20000616
US 2000-211797P	P	20000616
US 2000-211798P	P	20000616
US 2000-211801P	P	20000616
US 2000-212044P	P	20000616
US 2000-235335P	P	20000926

US 2000-235361P P 20000926
US 2000-235398P P 20000926

AB The present invention provides ten nucleic acids, their encoded proteins, and vectors for a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically **C**. **pneumoniae**. The method employs a vector contg. a nucleotide sequence encoding a polypeptide of a strain of **Chlamydia** pneumoniae operably linked to a promoter to effect expression of the gene product in the host. The polypeptides are derived from **C. pneumoniae** and are selected from an ATP-binding cassette protein, a secretory locus ORF, an endopeptidase, a protease, a metalloprotease, CLP protease ATPase, a CLP protease subunit, a transglycosylase/transpeptidase, a CLPc protease, and thioredoxin. Modifications are possible within the scope of this invention.

L30 ANSWER 3 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 2
ACCESSION NUMBER: 2001:748010 CAPLUS
DOCUMENT NUMBER: 135:268380
TITLE: **Chlamydia** pneumoniae immunogenic transmembrane protein and its gene sequence and use for immunization against **Chlamydia** infection
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela**
PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.
SOURCE: PCT Int. Appl., 90 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001075114	A2	20011011	WO 2001-CA462	20010404

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-194477P P 20000404

AB The present invention provides nucleic acids, proteins and vectors for a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically **C. pneumoniae**. The transmembrane protein gene is amplified from **C. pneumonia** strain CWLO29 by PCR and cloned into the pCA-Myc-His eukaryotic expression vector with transcription under control of the human cytomegalovirus promoter. The method employs a

plasmid vector contg. a nucleotide sequence encoding a transmembrane protein of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the transmembrane protein gene product in the host. DNA immunization of mice with the plasmid vector achieves protection against an intranasal challenge of **C. pneumoniae**.

L30 ANSWER 4 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 3
ACCESSION NUMBER: 2001:748009 CAPLUS
DOCUMENT NUMBER: 135:284102
TITLE: **Chlamydia** pneumoniae immunogenic myosin heavy chain homolog and its gene sequence and use for immunization against **Chlamydia** infection
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela**
PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.
SOURCE: PCT Int. Appl., 83 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001075113	A2	20011011	WO 2001-CA461	20010404

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-194475P P 20000404

AB The present invention provides nucleic acids, proteins and vectors for a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically **C. pneumoniae**. The myosin heavy chain homolog gene is amplified from **C. pneumonia** strain CWLO29 by PCR and cloned into the pCA-Myc-His eukaryotic expression vector with transcription under control of the human cytomegalovirus promoter. The method employs a plasmid vector contg. a nucleotide sequence encoding a myosin heavy chain homolog of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the myosin heavy chain homolog gene product in the host. DNA immunization of mice with the plasmid vector achieves protection against an intranasal challenge of **C. pneumoniae**.

L30 ANSWER 5 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 4
ACCESSION NUMBER: 2001:748008 CAPLUS
DOCUMENT NUMBER: 135:284101

TITLE: **Chlamydia** pneumoniae immunogenic glutamate-binding protein and its gene sequence and use for immunization against **Chlamydia** infection
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela**
PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.
SOURCE: PCT Int. Appl., 86 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001075112	A2	20011011	WO 2001-CA460	20010404
WO 2001075112	A3	20020228		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-194472P P 20000404

AB The present invention provides nucleic acids, proteins and vectors for a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically **C. pneumoniae**. The glutamate-binding protein gene is amplified from **C. pneumonia** strain CWLO29 by PCR and cloned into the pCA-Myc-His eukaryotic expression vector with transcription under control of the human cytomegalovirus promoter. The method employs a plasmid vector contg. a nucleotide sequence encoding a glutamate-binding protein of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the glutamate-binding protein gene product in the host. DNA immunization of mice with the plasmid vector achieves protection against an intranasal challenge of **C. pneumoniae**
.

L30 ANSWER 6 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 5
ACCESSION NUMBER: 2001:748007 CAPLUS
DOCUMENT NUMBER: 135:268379
TITLE: **Chlamydia** pneumoniae immunogenic myosin heavy chain and its gene sequence and use for immunization against **Chlamydia** infection
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela**
PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.

SOURCE: PCT Int. Appl., 83 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001075111	A2	20011011	WO 2001-CA456	20010404
WO 2001075111	A3	20020124		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-194471P P 20000404

AB The present invention provides nucleic acids, proteins and vectors for a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically **C. pneumoniae**. The myosin heavy chain gene is amplified from **C. pneumonia** strain CWLO29 by PCR and cloned into the pCA-Myc-His eukaryotic expression vector with transcription under control of the human cytomegalovirus promoter. The method employs a plasmid vector contg. a nucleotide sequence encoding a myosin heavy chain of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the myosin heavy chain gene product in the host. DNA immunization of mice with the plasmid vector achieves protection against an intranasal challenge of **C. pneumoniae**.

L30 ANSWER 7 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 6
ACCESSION NUMBER: 2001:747834 CAPLUS
DOCUMENT NUMBER: 135:302896
TITLE: **Chlamydia** antigens and corresponding DNA fragments and uses thereof
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela**
PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.
SOURCE: PCT Int. Appl., 88 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001074863	A2	20011011	WO 2001-CA455	20010404

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,

CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-194464P P 20000404

AB The present invention provides nucleic acids, proteins and vectors for a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically **C. pneumoniae**. The method employs a vector contg. a nucleotide sequence encoding an ATP-binding cassette of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the ATP-binding cassette gene product in the host. Modifications are possible within the scope of this invention.

L30 ANSWER 8 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 7

ACCESSION NUMBER: 2001:472751 CAPLUS
DOCUMENT NUMBER: 135:75736
TITLE: **Chlamydia** membrane ATPase and corresponding DNA fragments and uses thereof
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela**
PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.
SOURCE: PCT Int. Appl., 80 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001046226	A2	20010628	WO 2000-CA1536	20001220

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-171538P P 19991222

AB The present invention provides a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically **C. pneumoniae**, employing a vector contg. a nucleotide sequence encoding a membrane ATPase of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of

the membrane ATPase in the host. Modifications are possible within the scope of this invention.

L30 ANSWER 9 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 8
ACCESSION NUMBER: 2001:472750 CAPLUS
DOCUMENT NUMBER: 135:75735
TITLE: **Chlamydia** outer membrane protein and corresponding DNA fragments and uses thereof
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela**
PATENT ASSIGNEE(S): Aventis Pasteur Ltd., Can.
SOURCE: PCT Int. Appl., 74 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001046225	A2	20010628	WO 2000-CA1535	20001220
WO 2001046225	A3	20011206		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-171539P P 19991222
AB The present invention provides a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically **C. pneumoniae**, employing a vector contg. a nucleotide sequence encoding an outer membrane protein of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the outer membrane protein in the host. Modifications are possible within the scope of this invention.

L30 ANSWER 10 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 9
ACCESSION NUMBER: 2001:472749 CAPLUS
DOCUMENT NUMBER: 135:75734
TITLE: **Chlamydia** omp P6 precursor protein and corresponding DNA fragments and uses thereof
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela**
PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.
SOURCE: PCT Int. Appl., 74 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001046224	A2	20010628	WO 2000-CA1534	20001220
WO 2001046224	A3	20011206		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-171525P P 19991222

AB The present invention provides a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically **C. pneumoniae**, employing a vector contg. a nucleotide sequence encoding an omp P6 precursor of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the omp P6 precursor in the host. Modifications are possible within the scope of this invention.

L30 ANSWER 11 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 10

ACCESSION NUMBER: 2001:380619 CAPLUS
DOCUMENT NUMBER: 135:4464
TITLE: DNA vaccine against **Chlamydia** pneumoniae
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela**
PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.
SOURCE: PCT Int. Appl., 80 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001036457	A2	20010525	WO 2000-CA1346	20001110
WO 2001036457	A3	20011101		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-165615P P 19991115
AB The authors disclose an amino acid transporter of **Chlamydia** pneumoniae, which on genetic immunization of mice, provides a protective immune response.

L30 ANSWER 12 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 11
ACCESSION NUMBER: 2001:380618 CAPLUS
DOCUMENT NUMBER: 135:4463
TITLE: **Chlamydia** antigens and corresponding DNA fragments and uses thereof
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela**
PATENT ASSIGNEE(S): Aventis Pasteur Ltd., Can.
SOURCE: PCT Int. Appl., 76 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001036456	A2	20010525	WO 2000-CA1345	20001110
WO 2001036456	A3	20011004		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-164918P P 19991115
AB The present invention provides a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically **C. pneumoniae**, employing a vector contg. a nucleotide sequence encoding an OppB gene product of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the OppB gene product in the host. Modifications are possible within the scope of this invention.

L30 ANSWER 13 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 12
ACCESSION NUMBER: 2001:380617 CAPLUS
DOCUMENT NUMBER: 135:18543
TITLE: **Chlamydia** antigens and corresponding DNA fragments and uses thereof
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela**
PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.
SOURCE: PCT Int. Appl., 83 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001036455	A2	20010525	WO 2000-CA1344	20001110
WO 2001036455	A3	20011018		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-164823P P 19991112

AB The present invention provides a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically **C. pneumoniae**, employing a vector contg. a nucleotide sequence encoding a membrane ATPase of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the membrane ATPase in the host. Modifications are possible within the scope of this invention.

L30 ANSWER 14 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 13
ACCESSION NUMBER: 2001:229054 CAPLUS
DOCUMENT NUMBER: 134:251202
TITLE: Sequences of **Chlamydia** pneumoniae antigen lpxB, and their diagnostic and therapeutic uses
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela**
PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.
SOURCE: PCT Int. Appl., 80 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001021810	A1	20010329	WO 2000-CA1085	20000915

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,

BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.: US 1999-154461P P 19990917
AB The invention provides protein and DNA sequences of full-length antigen lpxB of **Chlamydia** pneumoniae. The present invention also relates to immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically **C. pneumoniae**, employing a vector contg. a **Chlamydia** protein gene and a promoter to effect expression of the antigen lpxB gene in the host.
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 15 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 14
ACCESSION NUMBER: 2001:229051 CAPLUS
DOCUMENT NUMBER: 134:248624
TITLE: Sequences of **Chlamydia** pneumoniae hypothetical apoptosis inhibitor and their diagnostic and therapeutic uses
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela**
PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.
SOURCE: PCT Int. Appl., 75 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001021806	A1	20010329	WO 2000-CA1090	20000915

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.: US 1999-154324P P 19990917
AB The invention provides protein and DNA sequences of full-length hypothetical apoptosis inhibitor of **Chlamydia** pneumoniae. The present invention also relates to immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically **C. pneumoniae**, employing a vector contg. a **Chlamydia** protein gene and a promoter to effect expression of the hypothetical apoptosis inhibitor gene in the host.
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 16 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 15
ACCESSION NUMBER: 2001:229050 CAPLUS

DOCUMENT NUMBER: 134:248623
TITLE: Sequences of **Chlamydia** pneumoniae general secretion pathway protein E, and their diagnostic and therapeutic uses
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela**
PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.
SOURCE: PCT Int. Appl., 79 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001021805	A1	20010329	WO 2000-CA1089	20000915

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-154595P P 19990917

AB The invention provides protein and DNA sequences of full-length general secretion pathway protein E of **Chlamydia** pneumoniae. The present invention also relates to immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically **C. pneumoniae**, employing a vector contg. a **Chlamydia** protein gene and a promoter to effect expression of the general secretion pathway protein E gene in the host.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 17 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 16
ACCESSION NUMBER: 2001:229049 CAPLUS
DOCUMENT NUMBER: 134:248622
TITLE: Sequences of **Chlamydia** pneumoniae outer membrane protein OMP, and their diagnostic and therapeutic uses
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela**
PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.
SOURCE: PCT Int. Appl., 82 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001021804	A1	20010329	WO 2000-CA1088	20000915

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-154652P P 19990920

AB The invention provides protein and DNA sequences of full-length outer membrane protein OMP of **Chlamydia** pneumoniae. The present invention also relates to immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically **C. pneumoniae**, employing a vector contg. a **Chlamydia** protein gene and a promoter to effect expression of the outer membrane protein OMP gene in the host.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 18 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 17

ACCESSION NUMBER: 2001:229048 CAPLUS
DOCUMENT NUMBER: 134:262613
TITLE: Sequences of **Chlamydia** pneumoniae ADP/ATP translocase gene Npt2, and their diagnostic and therapeutic uses
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela**
PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.
SOURCE: PCT Int. Appl., 79 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001021803	A1	20010329	WO 2000-CA1087	20000915

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-154326P P 19990917

AB The invention provides protein and DNA sequences of full-length

ADP/ATP translocase gene Npt2 of **Chlamydia** pneumoniae. The present invention also relates to immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically **C. pneumoniae**, employing a vector contg. a **Chlamydia** protein gene and a promoter to effect expression of the ADP/ATP translocase gene Npt2 in the host.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 19 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 18
ACCESSION NUMBER: 2001:229047 CAPLUS
DOCUMENT NUMBER: 134:251201
TITLE: Sequences of **Chlamydia** pneumoniae antigen lpdA, and their diagnostic and therapeutic uses
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela**
PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.
SOURCE: PCT Int. Appl., 78 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001021802	A1	20010329	WO 2000-CA1086	20000915

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-154325P P 19990917

AB The invention provides protein and DNA sequences of full-length antigen lpdA of **Chlamydia** pneumoniae. The present invention also relates to immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically **C. pneumoniae**, employing a vector contg. a **Chlamydia** protein gene and a promoter to effect expression of the antigen lpdA gene in the host.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 20 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 19
ACCESSION NUMBER: 2001:31651 CAPLUS
DOCUMENT NUMBER: 134:99571
TITLE: **Chlamydia** antigen orfF and corresponding DNA sequences and uses for

diagnosis, preventing, and treatment of **Chlamydia** infection
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela**
PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.
SOURCE: PCT Int. Appl., 79 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001002575	A1	20010111	WO 2000-CA778	20000628

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-141270P P 19990630
AB An open reading frame (ORF) encoding tge Chlamydial orfF protein has been identified from the **C. pneumoniae** genome. The gene encoding this protein has been inserted onto the expression plasmid and shown to confer immune protection against Chlamydial infection. Accordingly, this orfF and related polypeptides can be used in methods to prevent, treat, and diagnose **Chlamydia** infection in mammals including humans. Modifications are possible within the scope of this invention.
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 21 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 20
ACCESSION NUMBER: 2000:790638 CAPLUS
DOCUMENT NUMBER: 133:334048
TITLE: **Chlamydia** pneumoniae protein and DNA sequences, and their diagnostic and therapeutic uses
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela**
PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.
SOURCE: PCT Int. Appl., 112 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2000066739 A2 20001109 WO 2000-CA511 20000503
WO 2000066739 A3 20010111
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
EP 1177301 A2 20020206 EP 2000-925004 20000503
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
PRIORITY APPLN. INFO.: US 1999-132270P P 19990503
US 1999-141276P P 19990630
WO 2000-CA511 W 20000503

AB The invention provides protein and DNA sequences of full-length, 5'-truncated or 3'-truncated 76kDa protein of a strain of **Chlamydia** pneumoniae. The present invention also relates to immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically **C**. **pneumoniae**, employing a vector contg. a **Chlamydia** protein gene and a promoter to effect expression of the 76kDa protein gene in the host.

L30 ANSWER 22 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 21
ACCESSION NUMBER: 2000:666879 CAPLUS
DOCUMENT NUMBER: 133:251269
TITLE: **Chlamydia** pneumoniae antigenic membrane protein and DNA sequences, and their diagnostic and therapeutic uses
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela**
PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.
SOURCE: PCT Int. Appl., 77 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000055326	A1	20000921	WO 2000-CA240	20000309
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1163342	A1	20011219	EP 2000-908862	20000309
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRIORITY APPLN. INFO.: US 1999-123966P P 19990312
WO 2000-CA240 W 20000309

AB The invention provides protein and DNA sequences of a 60kDa cysteine-rich antigenic membrane protein of a strain of **Chlamydia** pneumoniae. The present invention also relates to immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically **C . pneumoniae**, employing a vector contg. a **Chlamydia** antigenic membrane protein gene and a promoter to effect expression of the 60kDa cysteine-rich membrane protein gene in the host.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 23 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 22
ACCESSION NUMBER: 2000:646146 CAPLUS
DOCUMENT NUMBER: 133:221591
TITLE: **Chlamydia** pneumoniae antigenic membrane protein and corresponding DNA fragments and their diagnostic and therapeutic uses
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela**
PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.
SOURCE: PCT Int. Appl., 68 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000053764	A1	20000914	WO 2000-CA239	20000309

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-123968P P 19990312

AB The invention provides protein and DNA sequences of a 9kDa cysteine-rich antigenic membrane protein of a strain of **Chlamydia** pneumoniae. The present invention also relates to immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia** , specifically **C. pneumoniae** , employing a vector contg. a **Chlamydia** antigenic membrane protein gene and a promoter to effect expression of the 9kDa cysteine-rich membrane protein gene in the host.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 24 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 23
ACCESSION NUMBER: 2000:457095 CAPLUS
DOCUMENT NUMBER: 133:88218
TITLE: **Chlamydia** antigens and corresponding DNA fragments and uses thereof
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe**
PATENT ASSIGNEE(S): Connaught Laboratories Ltd., Can.
SOURCE: PCT Int. Appl., 215 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000039158	A1	20000706	WO 1999-CA1230	19991223
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1140999	A1	20011010	EP 1999-962008	19991223
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 2002037293	A1	20020328	US 2001-886468	20010622

PRIORITY APPLN. INFO.:

US 1998-113280P	P	19981223
US 1998-113281P	P	19981223
US 1998-113282P	P	19981223
US 1998-113283P	P	19981223
US 1998-113284P	P	19981223
US 1998-113285P	P	19981223
US 1998-113385P	P	19981223
US 1998-114050P	P	19981228
US 1998-114056P	P	19981228
US 1998-114057P	P	19981228
US 1998-114058P	P	19981228
US 1998-114059P	P	19981228
US 1998-114061P	P	19981228
WO 1999-CA1230	W	19991223

AB The present invention provides purified and isolated polynucleotide mols. that encode **Chlamydia** polypeptides which can be used in methods to prevent, treat, and diagnose **Chlamydia** infection. In one form of the invention, the polynucleotide mols. are selected from DNA that encode polypeptides CPN100686 RY 54 (SEQ ID Nos: 1 and 14), CPN100696 RY-55 (SEQ ID Nos: 2 and 15), CPN100709 RY-57 (SEQ ID Nos: 3 and 16), CPN100710 RY-58 (SEQ ID Nos: 4 and 17), CPN100711 RY-59 (SEQ ID Nos: 5 and 18), CPN100877 RY-61 (SEQ ID Nos: 6 and 19), CPN100325 RY-62 (SEQ ID Nos: 7 and 20), CPN100368 RY-63 (SEQ ID Nos:8 and 21), CPN100624 RY-64 (SEQ ID Nos:9 and 22), CPN100633 RY-65 (SEQ ID Nos:10 and 23), CPN100985 RY-66 (SEQ ID Nos:11 and 24), CPN100987 RY-67 (SEQ ID Nos:12 and 25) and CPN100988 RY-68 (SEQ ID Nos:13 and 26).

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 25 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 24
ACCESSION NUMBER: 2000:457094 CAPLUS
DOCUMENT NUMBER: 133:88217
TITLE: **Chlamydia** antigens and corresponding DNA fragments and uses thereof
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela**
PATENT ASSIGNEE(S): Connaught Laboratories Ltd., Can.
SOURCE: PCT Int. Appl., 81 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000039157	A1	20000706	WO 1999-CA1224	19991222
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1140998	A1	20011010	EP 1999-960752	19991222
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRIORITY APPLN. INFO.:
US 1998-114060P P 19981228
US 1999-123967P P 19990312
US 1999-141271P P 19990630
WO 1999-CA1224 W 19991222

AB The present invention provides a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia** , specifically **C. pneumoniae** , employing a vector contg. a nucleotide sequence encoding an ATP/ADP translocase of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the ATP/ADP translocase gene in the host. Modifications are possible within the scope of this invention.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 26 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 25
ACCESSION NUMBER: 2000:384447 CAPLUS
DOCUMENT NUMBER: 133:13445
TITLE: **Chlamydia** pneumoniae antigens and corresponding DNA fragments
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe**

PATENT ASSIGNEE(S): Connaught Laboratories Limited, Can.
SOURCE: PCT Int. Appl., 174 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000032794	A2	20000608	WO 1999-CA1147	19991201
WO 2000032794	A3	20001109		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1135509	A2	20010926	EP 1999-957785	19991201

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.:

US 1998-110339P	P	19981201
US 1998-110340P	P	19981201
US 1998-110427P	P	19981201
US 1998-110428P	P	19981201
US 1998-110438P	P	19981201
WO 1999-CA1147	W	19991201

AB The present invention provides five purified and isolated polynucleotide mols. that encode **Chlamydia** pneumoniae polypeptides which can be used in methods to prevent, treat and diagnose **Chlamydia** infection. In one form of the invention, the polynucleotide mols. are selected from DNA that encode polypeptides CPN100634, CPN100635, CPN100638, CPN100639, and CPN100708.

L30 ANSWER 27 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 26
ACCESSION NUMBER: 2000:384432 CAPLUS
DOCUMENT NUMBER: 133:29606
TITLE: A **Chlamydia** pneumoniae 98kDa outer membrane protein and gene sequences, and uses for immunization and diagnosis
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela**
PATENT ASSIGNEE(S): Connaught Laboratories Limited, Can.
SOURCE: PCT Int. Appl., 98 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000032784	A1	20000608	WO 1999-CA1148	19991201

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 2000037909	A5	20000619	AU 2000-37909	19991201
EP 1135501	A1	20010926	EP 1999-957786	19991201

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.:	US 1998-110439P	P 19981201
	US 1999-132272P	P 19990503
	WO 1999-CA1148	W 19991201

AB The invention provides sequences of a **Chlamydia** pneumoniae 98kDa putative outer membrane protein (OMP) CPN100640 and corresponding DNA which can be used in methods to prevent, treat, and diagnose **Chlamydia** infections in mammals, including humans. In particular, a vaccine vector encoding OMP or an OMP/signal peptide fusion protein is provided as is its use in immunization against **Chlamydia**. Probes/primers and antibodies for diagnostic use are also provided. BALB/C mice vaccinated with an expression vector for OMP antigen showed increased resistance to challenge with **C. pneumoniae**.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 28 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 27

ACCESSION NUMBER:	2000:314840 CAPLUS
DOCUMENT NUMBER:	132:333384
TITLE:	**Chlamydia** PilG-like antigens and corresponding genes and uses for diagnosis, preventing, and treatment of **Chlamydia** infection
INVENTOR(S):	**Murdin, Andrew David; Oomen, Raymond Peter; Dunn, Pamela Lesley**
PATENT ASSIGNEE(S):	Connaught Laboratories Limited, Can.
SOURCE:	PCT Int. Appl., 88 pp. CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000026376	A1	20000511	WO 1999-GB3582	19991029

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,

DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
EP 1124966 A1 20010822 EP 1999-954097 19991029
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
PRIORITY APPLN. INFO.: US 1998-106071P P 19981029
US 1999-133202P P 19990507
US 1999-428589 A 19991027
WO 1999-GB3582 W 19991029

AB The present invention provides a gene of **Chlamydia** pneumoniae encoding PilG-like proteins found in the bacterial inclusion membrane structure. PilG-like genes and proteins can be used in methods to prevent, treat, and diagnose **Chlamydia** infection in mammals including humans. BALB/C mice vaccinated with an expression vector for PilG-like protein showed increased resistance to challenge with **C. pneumoniae**. Vaccinated mice showed slower rates of growth of **C. pneumoniae** in lungs. Modifications are possible within the scope of this invention.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 29 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 28
ACCESSION NUMBER: 2000:314720 CAPLUS
DOCUMENT NUMBER: 132:346613
TITLE: **Chlamydia** antigens and corresponding DNA fragments and uses thereof
INVENTOR(S): **Murdin, Andrew David; Oomen, Raymond Peter; Dunn, Pamela Lesley**
PATENT ASSIGNEE(S): Connaught Laboratories Limited, Can.
SOURCE: PCT Int. Appl., 97 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000026239	A2	20000511	WO 1999-GB3622	19991102
WO 2000026239	A3	20000810		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1127065 A2 20010829 EP 1999-954126 19991102
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
PRIORITY APPLN. INFO.: US 1998-106590P P 19981102
US 1999-133071P P 19990507
US 1999-430723 A 19991029
WO 1999-GB3622 W 19991102

AB The present invention provides a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically **C. pneumoniae**, employing a vector, contg. a nucleotide sequence encoding an POMP91B precursor protein of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the POMP91B precursor gene in the host. Also provided are fusion proteins and vaccines contg. POMP91B precursor protein, POMP91B-specific polyclonal and monoclonal antibodies, polynucleotide probes and primers, and affinity chromatog. method for purifying the polypeptide.

L30 ANSWER 30 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 29
ACCESSION NUMBER: 2000:314718 CAPLUS
DOCUMENT NUMBER: 132:333380
TITLE: Sequences of a **Chlamydia** pneumoniae 98kDa putative outer membrane protein, and uses thereof in diagnostic and therapeutic applications
INVENTOR(S): **Murdin, Andrew David; Oomen, Raymond Peter; Dunn, Pamela Lesley**
PATENT ASSIGNEE(S): Connaught Laboratories Limited, Can.
SOURCE: PCT Int. Appl., 93 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000026237	A2	20000511	WO 1999-GB3579	19991029
WO 2000026237	A3	20000921		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1124849	A2	20010822	EP 1999-954095	19991029
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRIORITY APPLN. INFO.:
US 1998-106070P P 19981029
US 1999-122066P P 19990301
US 1999-428122 A 19991027
WO 1999-GB3579 W 19991029

AB The invention provides sequences of a **Chlamydia** pneumoniae 98kDa putative outer membrane protein (OMP) which can be used in methods to prevent, treat, and diagnose **Chlamydia** infections. In particular, a vaccine vector encoding OMP or an OMP/signal peptide fusion protein is provided as is its use in immunization against **Chlamydia**. Probes/primers for diagnostic use are also provided.

L30 ANSWER 31 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 30

ACCESSION NUMBER: 2000:291251 CAPLUS
DOCUMENT NUMBER: 132:307251
TITLE: **Chlamydia** pneumoniae 98-kDa outer membrane protein and corresponding DNA and use for vaccine immunization
INVENTOR(S): **Murdin, Andrew David; Oomen, Raymond Peter; Dunn, Pamela Lesley**
PATENT ASSIGNEE(S): Connaught Laboratories Limited, Can.
SOURCE: PCT Int. Appl., 101 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000024902	A1	20000504	WO 1999-GB3571	19991028
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9963598	A1	20000515	AU 1999-63598	19991028
EP 1124965	A1	20010822	EP 1999-951023	19991028
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRIORITY APPLN. INFO.:

US 1998-106046P	P	19981028
US 1999-132271P	P	19990503
US 1999-427533	A	19991026
WO 1999-GB3571	W	19991028

AB The present invention provides a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically **C. pneumoniae** , employing a vector, contg. a nucleotide sequence encoding a 98-kDa outer membrane protein of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the gene in the host. Modifications are possible within the scope of this invention.

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 32 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 31
ACCESSION NUMBER: 2000:291249 CAPLUS
DOCUMENT NUMBER: 132:307250
TITLE: **Chlamydia** pneumoniae gene lorf2 antigen and corresponding DNA and use for vaccine immunization
INVENTOR(S): **Murdin, Andrew David; Oomen, Raymond Peter; Dunn, Pamela Lesley**
PATENT ASSIGNEE(S): Connaught Laboratories Limited, Can.
SOURCE: PCT Int. Appl., 88 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000024901	A1	20000504	WO 1999-GB3565	19991028
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9963593	A1	20000515	AU 1999-63593	19991028
EP 1124964	A1	20010822	EP 1999-951017	19991028
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRIORITY APPLN. INFO.:
US 1998-106037P P 19981028
US 1999-154658P P 19990920
US 1999-427501 A 19991026
WO 1999-GB3565 W 19991028

AB The present invention provides a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically **C. pneumoniae** , employing a vector, contg. a nucleotide sequence encoding a lorf2 protein of a strain of **Chlamydia** pneumoniae and a promoter to effect expression of the lorf2 gene in the host. Modifications are possible within the scope of this invention.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 33 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 32
ACCESSION NUMBER: 2000:291072 CAPLUS
DOCUMENT NUMBER: 132:307249
TITLE: **Chlamydia** antigens and corresponding DNA fragments and their uses for diagnosis and treatment of **Chlamydia** infection
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe**
PATENT ASSIGNEE(S): Connaught Laboratories Limited, Can.
SOURCE: PCT Int. Appl., 226 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000024765	A2	20000504	WO 1999-CA992	19991028
WO 2000024765	A3	20001109		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,				

ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU,
SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF,
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
EP 1129202 A2 20010905 EP 1999-955602 19991028
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
PT, IE, SI, LT, LV, FI, RO
PRIORITY APPLN. INFO.: US 1998-106034P P 19981028
US 1998-106039P P 19981028
US 1998-106042P P 19981028
US 1998-106044P P 19981028
US 1998-106072P P 19981029
US 1998-106073P P 19981029
US 1998-106074P P 19981029
US 1998-106087P P 19981029
US 1998-106587P P 19981102
US 1998-106588P P 19981102
US 1998-106589P P 19981102
US 1998-107034P P 19981102
US 1998-107035P P 19981102
WO 1999-CA992 W 19991028

AB The present invention provides purified and isolated polynucleotide mols. that encode 13 **Chlamydia** pneumoniae polypeptides which can be used in methods to prevent, treat, and diagnose **Chlamydia** infection. The nucleotide and deduced amino acid sequences of the 13 genes and proteins are provided.

L30 ANSWER 34 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 33
ACCESSION NUMBER: 2000:145036 CAPLUS
DOCUMENT NUMBER: 132:176659
TITLE: **Chlamydia** pneumoniae antigens and corresponding DNA fragments and their diagnostic and therapeutic uses
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.**
PATENT ASSIGNEE(S): Connaught Laboratories Limited, Can.
SOURCE: PCT Int. Appl., 203 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000011183	A2	20000302	WO 1999-IB1449	19990818
WO 2000011183	A3	20000608		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD,
SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU,
ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE,
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,

CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9952973	A1	20000314	AU 1999-52973	19990818
EP 1104470	A2	20010606	EP 1999-938465	19990818

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.:

US 1998-97187P	P	19980820
US 1998-97188P	P	19980820
US 1998-97189P	P	19980820
US 1998-97190P	P	19980820
US 1998-97195P	P	19980820
US 1998-97196P	P	19980820
US 1998-97197P	P	19980820
US 1998-97191P	P	19980827
US 1999-376770	A2	19990817
WO 1999-IB1449	W	19990818

AB In the **Chlamydia** pneumoniae genome, 8 open reading frames encoding chlamydial polypeptides are provided. These polypeptides include polypeptides permanently found in the bacterial membrane structure, polypeptides that are present in the external vicinity of the bacterial membrane, polypeptides permanently found in the inclusion membrane structure, polypeptides that are present in the external vicinity of the inclusion membrane, and polypeptides that are released into the cytoplasm of the infected cell. These polypeptides can be used in vaccination methods for preventing and treating **Chlamydia** infection. Thus, the present invention provides a method of nucleic acid immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia** pneumoniae, employing a vector contg. a nucleotide sequence encoding any of the following polypeptides: CPN 100111, CPN 100224, CPN 100230, CPN 100231, CPN 100232, CPN 100235, CPN 100394, CPN 100395 and a promoter to effect expression of any of the polypeptides in the host.

L30 ANSWER 35 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 34

ACCESSION NUMBER: 2000:145034 CAPLUS
DOCUMENT NUMBER: 132:205395
TITLE: Antigenic inclusion membrane protein C of **Chlamydia** and the gene encoding it and their uses
INVENTOR(S): **Murdin, Andrew D.; Dunn, Pamela L.; Oomen, Raymond P.**
PATENT ASSIGNEE(S): Connaught Laboratories Limited, Can.
SOURCE: PCT Int. Appl., 68 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000011181	A1	20000302	WO 1999-CA766	19990819

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9953660	A1	20000314	AU 1999-53660	19990819
EP 1105490	A1	20010613	EP 1999-939280	19990819

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.:	US 1998-97199P	P	19980820
	US 1999-132961P	P	19990507
	WO 1999-CA766	W	19990819

AB An isolated and purified nucleic acid mol. encoding the inclusion membrane protein C of a strain of **Chlamydia**, is useful for nucleic acid immunization of a host, including a human host, against disease caused by infection by a strain of **Chlamydia**, particularly **C. pneumoniae**. The gene was cloned by PCR. BALB/C mice vaccinated with an expression vector for the protein showed increased resistance to challenge with **C. pneumoniae**. Vaccinated mice showed slower rates of growth of **C. pneumoniae** in the lungs than did control animals.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 36 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 35

ACCESSION NUMBER:	2000:145033 CAPLUS
DOCUMENT NUMBER:	132:205394
TITLE:	An antigenic outer membrane protein, POMP91A, of **Chlamydia** and the gene encoding it and their uses
INVENTOR(S):	**Murdin, Andrew D.; Dunn, Pamela L.; Oomen, Raymond P.**
PATENT ASSIGNEE(S):	Connaught Laboratories Limited, Can.
SOURCE:	PCT Int. Appl., 98 pp. CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000011180	A1	20000302	WO 1999-CA765	19990819

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9953659	A1	20000314	AU 1999-53659	19990819
EP 1105489	A1	20010613	EP 1999-939279	19990819

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.:	US 1998-97198P	P	19980820
	WO 1999-CA765	W	19990819

AB An isolated and purified nucleic acid mol. encoding a POMP91A protein of a strain of **Chlamydia**, is useful for nucleic acid immunization of a host, including a human host, against disease caused by infection by a strain of **Chlamydia**, particularly **C. pneumoniae**. The gene was cloned by PCR. BALB/C mice vaccinated with an expression vector for the protein showed increased resistance to challenge with **C. pneumoniae**. Vaccinated mice showed slower rates of growth of **C. pneumoniae** in the lungs than did control animals.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 37 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 36

ACCESSION NUMBER: 2000:98784 CAPLUS
DOCUMENT NUMBER: 132:147637
TITLE: Protein and DNA sequences encoding a **Chlamydia** pneumoniae outer membrane protein (designated CPN100314), and uses thereof in vaccines and diagnostic assays
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.; Dunn, Pamela L.**
PATENT ASSIGNEE(S): Connaught Laboratories Limited, Can.
SOURCE: PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000006743	A2	20000210	WO 1999-IB1333	19990727
WO 2000006743	A3	20000504		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9947934	A1	20000221	AU 1999-47934	19990727
EP 1108033	A2	20010620	EP 1999-931399	19990727
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

PRIORITY APPLN. INFO.:

US 1998-94203P	P	19980727
US 1999-122045P	P	19990301
US 1999-360434	A	19990726
WO 1999-IB1333	W	19990727

AB This invention provides protein and DNA sequences encoding a **Chlamydia** pneumoniae outer membrane protein, designated CPN100314. The invention also provides for the use of the disclosed protein/gene in vaccines against **Chlamydia**. Thus, the invention discloses a vector contg. a nucleotide sequence (gene omp) encoding CPN100314 operably linked to a promoter to effect expression of CPN100314 in the host. The invention also provides

for the use of the CPN100314 protein/gene in diagnostic assays for **Chlamydia** infection.

L30 ANSWER 38 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 37
ACCESSION NUMBER: 2000:98783 CAPLUS
DOCUMENT NUMBER: 132:147636
TITLE: Protein and DNA sequences encoding a **Chlamydia** pneumoniae antigen (designated CPN100605), and uses thereof in vaccines and diagnostic assays
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.**
PATENT ASSIGNEE(S): Connaught Laboratories Limited, Can.
SOURCE: PCT Int. Appl., 48 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000006742	A2	20000210	WO 1999-IB1331	19990727
WO 2000006742	A3	20000427		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9947932	A1	20000221	AU 1999-47932	19990727
EP 1105488	A2	20010613	EP 1999-931397	19990727
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

PRIORITY APPLN. INFO.:
US 1998-94195P P 19980727
US 1999-361443 A 19990726
US 1998-94192P P 19980727
WO 1999-IB1331 W 19990727

AB This invention provides protein and DNA sequences encoding a **Chlamydia** pneumoniae protein, designated CPN100605. The invention also provides for the use of the disclosed protein/gene in vaccines against **Chlamydia**. Thus, the invention discloses a vector contg. a nucleotide sequence encoding CPN100605 operably linked to a promoter to effect expression of CPN100605 in the host. The invention also provides for the use of the CPN100605 protein/gene in diagnostic assays for **Chlamydia** infection.

L30 ANSWER 39 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 38
ACCESSION NUMBER: 2000:98781 CAPLUS
DOCUMENT NUMBER: 132:147635
TITLE: Protein and DNA sequences encoding a **Chlamydia** pneumoniae outer membrane protein (designated CPN100501), and uses thereof in vaccines and diagnostic assays
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond**

P.; Dunn, Pamela L.
PATENT ASSIGNEE(S): Connaught Laboratories Limited, Can.
SOURCE: PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000006741	A1	20000210	WO 1999-IB1330	19990727
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9947931	A1	20000221	AU 1999-47931	19990727
EP 1100919	A1	20010523	EP 1999-931396	19990727
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRIORITY APPLN. INFO.:

US 1998-94192P	P	19980727
US 1999-122044P	P	19990301
US 1999-361440	A2	19990726
WO 1999-IB1330	W	19990727

AB This invention provides protein and DNA sequences encoding a **Chlamydia** pneumoniae outer membrane protein, designated CPN100501. The invention also provides for the use of the disclosed protein/gene in vaccines against **Chlamydia**. Thus, the invention discloses a vector contg. a nucleotide sequence (gene mip) encoding CPN100501 operably linked to a promoter to effect expression of CPN100501 in the host. The invention also provides for the use of the CPN100501 protein/gene in diagnostic assays for **Chlamydia** infection.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 40 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 39
ACCESSION NUMBER: 2000:98780 CAPLUS
DOCUMENT NUMBER: 132:147634
TITLE: Protein and DNA sequences encoding a **Chlamydia** pneumoniae antigen (designated CPN100149), and uses thereof in vaccines and diagnostic assays
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.**
PATENT ASSIGNEE(S): Connaught Laboratories Limited, Can.
SOURCE: PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000006740	A1	20000210	WO 1999-IB1329	19990727
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9947930	A1	20000221	AU 1999-47930	19990727
EP 1100918	A1	20010523	EP 1999-931395	19990727
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRIORITY APPLN. INFO.: US 1998-94191P P 19980727
US 1999-361040 A2 19990726
WO 1999-IB1329 W 19990727

AB This invention provides protein and DNA sequences encoding a **Chlamydia** pneumoniae protein, designated CPN100149. The invention also provides for the use of the disclosed protein/gene in vaccines against **Chlamydia**. Thus, the invention discloses a vector contg. a nucleotide sequence encoding CPN100149 operably linked to a promoter to effect expression of CPN100149 in the host. The invention also provides for the use of the CPN100149 protein/gene in diagnostic assays for **Chlamydia** infection.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 41 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 40
ACCESSION NUMBER: 2000:98778 CAPLUS
DOCUMENT NUMBER: 132:147633
TITLE: Protein and DNA sequences encoding a **Chlamydia** pneumoniae antigen (designated CPN100202), and uses thereof in vaccines and diagnostic assays
INVENTOR(S): **Murdin, Andrew D.; Oomen, Raymond P.**
PATENT ASSIGNEE(S): Connaught Laboratories Limited, Can.
SOURCE: PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000006739	A2	20000210	WO 1999-IB1328	19990727
WO 2000006739	A3	20010816		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW,				

AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9947929	A1	20000221	AU 1999-47929	19990727
EP 1144638	A2	20011017	EP 1999-931394	19990727
EP 1144638	A3	20011128		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.:	US 1998-94198P	P	19980727
	US 1999-360707	A2	19990726
	WO 1999-IB1328	W	19990727

AB This invention provides protein and DNA sequences encoding a **Chlamydia** pneumoniae protein, designated CPN100202. The invention also provides for the use of the disclosed protein/gene in vaccines against **Chlamydia**. Thus, the invention discloses a vector contg. a nucleotide sequence encoding CPN100202 operably linked to a promoter to effect expression of CPN100202 in the host. The invention also provides for the use of the CPN100202 protein/gene in diagnostic assays for **Chlamydia** infection. Sequence no. 4 claimed but not present.

L30 ANSWER 42 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 41

ACCESSION NUMBER:	2000:511106 CAPLUS
DOCUMENT NUMBER:	134:99306
TITLE:	Use of a mouse lung challenge model to identify antigens protective against **Chlamydia** pneumoniae lung infection
AUTHOR(S):	**Murdin, Andrew D.**; **Dunn, Pamela**; Sodoyer, Regis; **Wang, Joe**; Caterini, Judy; Brunham, Robert C.; Aujame, Luc; **Oomen, Ray**
CORPORATE SOURCE:	Molecular Biology, Aventis Pasteur, Toronto, ON, M2R 3T4, Can.
SOURCE:	Journal of Infectious Diseases (2000), 181(Suppl. 3), S544-S551 CODEN: JIDIAQ; ISSN: 0022-1899
PUBLISHER:	University of Chicago Press
DOCUMENT TYPE:	Journal
LANGUAGE:	English

AB **Chlamydia** pneumoniae is emerging as a significant human pathogen. Infection causes a range of respiratory tract diseases and is assocd. with atherosclerosis. A vaccine could provide a considerable public health benefit; however, antigens able to elicit a protective immune response are largely unknown. A panel of open-reading frames (ORFs) from the **C. pneumoniae** genome sequence was screened for ability to elicit protective responses. Balb/c mice immunized with DNA contg. the ORFs were tested for their ability to limit lung infection following an intranasal challenge. Immunization with DNA encoding the major outer membrane protein or an ADP/ATP translocase (Npt1Cp) of **C. pneumoniae** resulted in a reduced bacteria load in the lung after challenge. The identification of these antigens as protective is a significant step toward development of a **C. pneumoniae** vaccine and demonstrates the feasibility of using a DNA immunization strategy to screen the **C. pneumoniae** genome for other protective ORFs.

REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE

FOR THIS RECORD. ALL CITATIONS AVAILABLE
IN THE RE FORMAT

L30 ANSWER 43 OF 44 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2000225593 EMBASE
TITLE: Use of a mouse lung challenge model to identify antigens protective against **Chlamydia** pneumoniae lung infection.
AUTHOR: **Murdin A.D.**; **Dunn P.**; Sodoyer R.; **Wang J.**; Caterini J.; Brunham R.C.; Aujame L.; **Oomen R.**
CORPORATE SOURCE: Dr. A.D. Murdin, Aventis Pasteur Canada, 1755 Steeles Ave. W., Toronto, Ont. M2R 3T4, Canada. andrew.murdin@aventis.com
SOURCE: Journal of Infectious Diseases, (2000) 181/6 SUPPL. 3 (S544-S551).
Refs: 47
ISSN: 0022-1899 CODEN: JIDIAQ
COUNTRY: United States
DOCUMENT TYPE: Journal; Conference Article
FILE SEGMENT: 004 Microbiology
026 Immunology, Serology and Transplantation
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English

AB **Chlamydia** pneumoniae is emerging as a significant human pathogen. Infection causes a range of respiratory tract diseases and is associated with atherosclerosis. A vaccine could provide a considerable public health benefit; however, antigens able to elicit a protective immune response are largely unknown. A panel of open-reading frames (ORFs) from the **C. pneumoniae** genome sequence was screened for ability to elicit protective responses. Balb/c mice immunized with DNA containing the ORFs were tested for their ability to limit lung infection following an intranasal challenge. Immunization with DNA encoding the major outer membrane protein or an ADP/ATP translocase (Npt1(Cp)) of **C. pneumoniae** resulted in a reduced bacteria load in the lung after challenge. The identification of these antigens as protective is a significant step toward development of a **C. pneumoniae** vaccine and demonstrates the feasibility of using a DNA immunization strategy to screen the **C. pneumoniae** genome for other protective ORFs.

L30 ANSWER 44 OF 44 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 42
ACCESSION NUMBER: 1995:382778 CAPLUS
DOCUMENT NUMBER: 122:142485
TITLE: Hybrid picornaviruses expressing chlamydial epitopes
INVENTOR(S): **Murdin, Andrew David**; Caldwell, Harlan Delano; Klein, Michel Henri; **Oomen, Raymond Peter**
PATENT ASSIGNEE(S): Connaught Laboratories Ltd., Can.
SOURCE: PCT Int. Appl., 98 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9426900	A2	19941124	WO 1994-CA262	19940512
W: AU, BR, CA, CN, FI, JP, KR, NO, NZ, RU, UA, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2162664	AA	19941124	CA 1994-2162664	19940512
AU 9467183	A1	19941212	AU 1994-67183	19940512
EP 698100	A1	19960228	EP 1994-915485	19940512
R: DE, FR, GB				

PRIORITY APPLN. INFO.: US 1993-60978 19930513
WO 1994-CA262 19940512

AB Hybrid picornaviruses expressing chlamydial epitopes from the major outer membrane protein (MOMP) of **Chlamydia** trachomatis in a functional form are described. The hybrid viruses grow to high titer in cell culture and when administered to mammals induce an immune response against both the picornavirus and C. trachomatis. The antisera from immunized mammals neutralized both homotypic and heterotypic serovars of C. trachomatis. The hybrid picornaviruses have utility as vaccines and as tools for the generation of immunol. reagents. Methods for modifying surface exposed loops of known sequences to produce hybrid proteins are described. Thus using a SalI-HindIII mutagenesis cartridge, the PV1-Mahoney cDNA clone pT7XLD was modified to encode amino acid sequence from C. trachomatis MOMP variable domain I and variable domain IV. The mutagenesis cartridge is contained between poliovirus nucleotides 2753-2791, which encode poliovirus amino acids 1092-1104 that include the BC loop of capsid protein VP1. The polio-specific nucleotide sequence within the cartridge was replace with synthetic oligonucleotides encoding the C. trachomatis MOMP epitopes. Several details strategies are presented for genetic engineering of the picornavirus constructs. The advantages of the hybrid picornaviruses include (1) growth of the hybrid picornaviruses to a high titer, (2) the capability to induce a strong and cross-reactive anti-chlamydial immune response at the same time as inducing a strong anti-polio immune response, (3) administration of the picornaviruses as oral vaccines in combination with one or more other immunogenic and/or immunostimulating mols., (4) and no possibility of potentiating chlamydial disease by sensitizing vaccines because of the absence of the 57-kDa SRP.

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